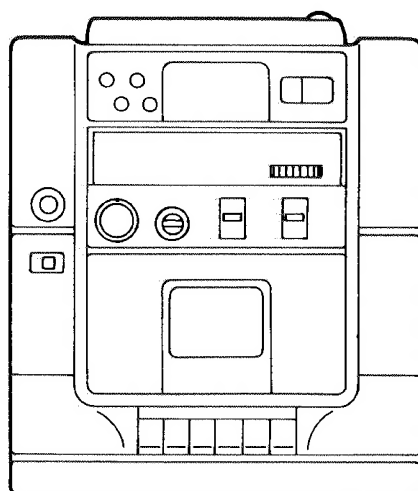


JVC**Revision**

SERVICE MANUAL

CD PORTABLE SYSTEM

PC-X55 B/C/E/G/GI/J/VX/U



COMPACT
disc
DIGITAL AUDIO


Area Suffix

B.....	U.K.
C.....	Canada
E.....	Continental Europe
G.....	Germany
GI.....	Italy
J.....	U.S.A.
VX.....	Eastern Europe
U.....	Other Area

Contents

1. Safety Precautions.....	Page 2	10. Troubleshooting.....	36
2. Safety Precaution about PC - X55.....	3	11. Block Diagram.....	41
3. Main Features.....	8	12. Standard Schematic Diagram.....	45
4. Specifications.....	8	13. Wiring Connections.....	51
5. Instructions(Extract).....	9	14. Location of P.C. Board Parts.....	52
6. Location of Main Parts.....	17	15. Electrical Parts List.....	58
7. Removal of Main Parts.....	18	16. Illustration of Packing and Parts List.....	64
8. Analytic Drawing and Parts List.....	20	17. Accessories.....	65
9. Main Adjustment.....	27		

1. Safety Precautions

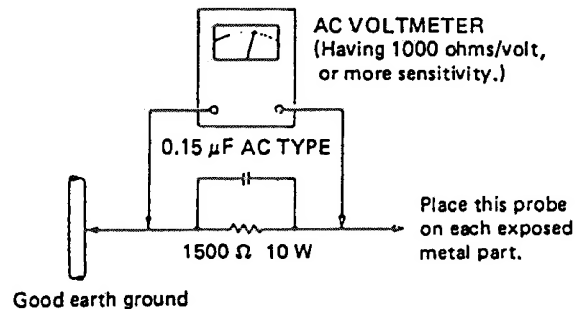
1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacture's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety — related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematic and by () on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and /or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage current tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC(r.m.s.).

- Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohms 10W resistor paralleled by a 0.15 μ F AC type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a



return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC(r.m.s.). This corresponds to 0.5mA AC(r.m.s.).

Warning (Except C/J/U version)

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

2. Safety Precaution about PC — X55

■ Important management regarding safety(C/J version only)

1. Fuse caution letters & graphic indication .

PC — X55J ONLY

Full Fusereplacement Marking

Graphic symbol mark



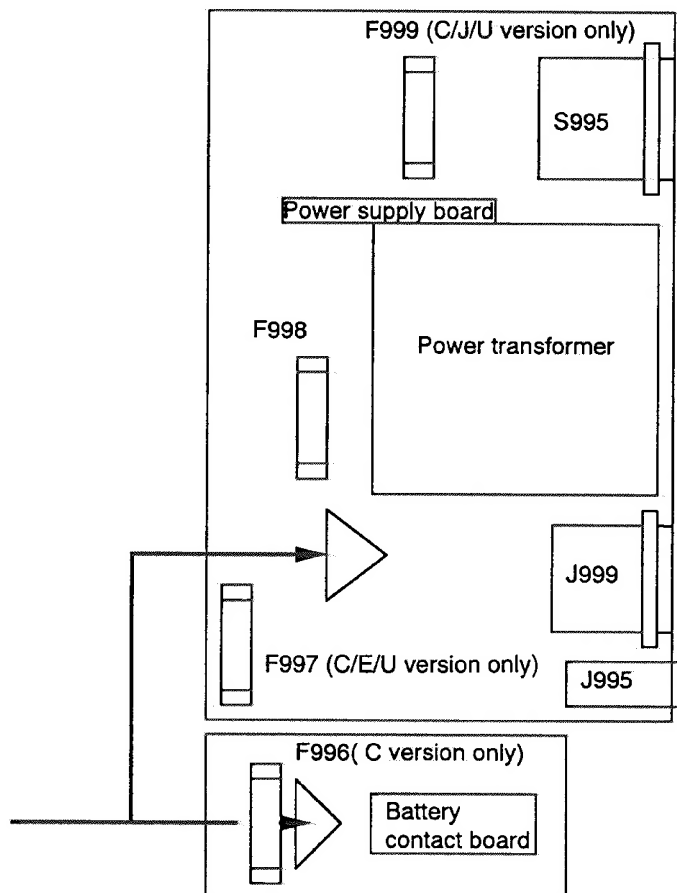
should be read as follows:

FUSE CAUTION

F998 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 3-A, 250-V FUSE.

F999 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 400mA, 250-V FUSE.

Fuse caution : graphic symbol mark



PC — X55C SEULEMENT

Marquage Pour Le Remplacement Complet De Fusible

Le symbole graphique (Ce symbole signifie fusible de type à fusion rapide.)



doit être interprété comme suit:

PRECAUTIONS SUR LES FUSIBLES

F996: POUR UNE PROTECTION CONTINUE

F997: POUR UNE PROTECTION CONTINUE

F998 CONTRE DES RISQUES D'INCENDIE, REMPLACER SEULEMENT PAR UN FUSIBLE DU MEME TYPE 3-A, 250-V.

F999: POUR UNE PROTECTION CONTINUE CONTRE DES RISQUES D'INCENDIE, REMPLACER SEULEMENT PAR UN FUSIBLE DU MEME TYPE 400-mA, 250-V.

PC — X55C ONLY

Full Fusereplacement Marking

Graphic symbol mark (This symbol means fast blow type fuse.)



should be read as follows:

FUSE CAUTION

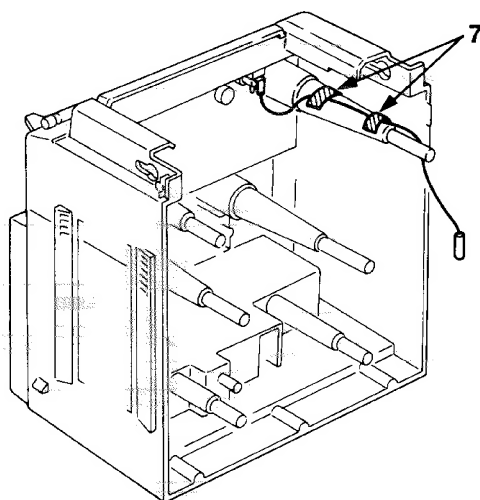
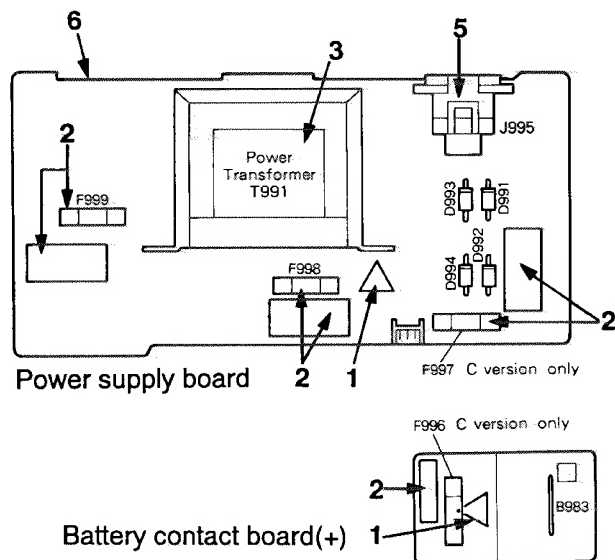
F996 : FOR CONTINUED PROTECTION

F997 : FOR CONTINUED PROTECTION

F998 AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 3-A, 250-V FUSE.

F999 : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 400-mA, 250-V FUSE.

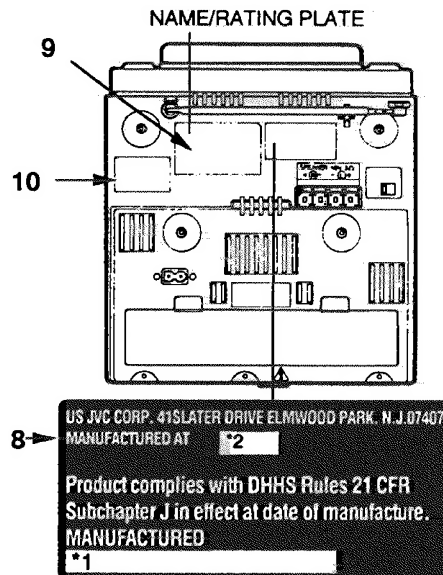
■ PC-X55 C/J



IMPORTANT FOR LASER PRODUCTS
(For U.S.A. only)

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.
6. **CAUTION:** The laser is able to function, if safety switches out of function. The laser light is invisible, avoid exposure, do not disassemble the laser unit, but replace the complete unit.

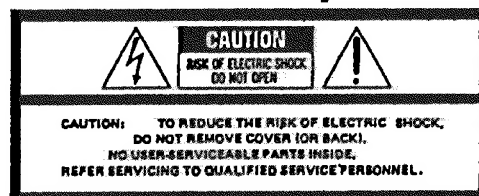
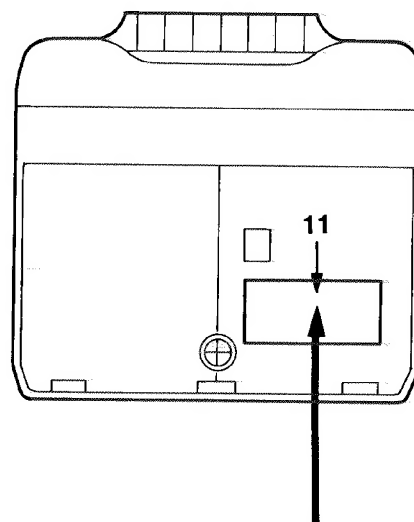
IDENTIFICATION LABEL AND CERTIFICATION LABEL



Notes:

*1 The date of manufacture.

*2 The ID code of manufacturing plant.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

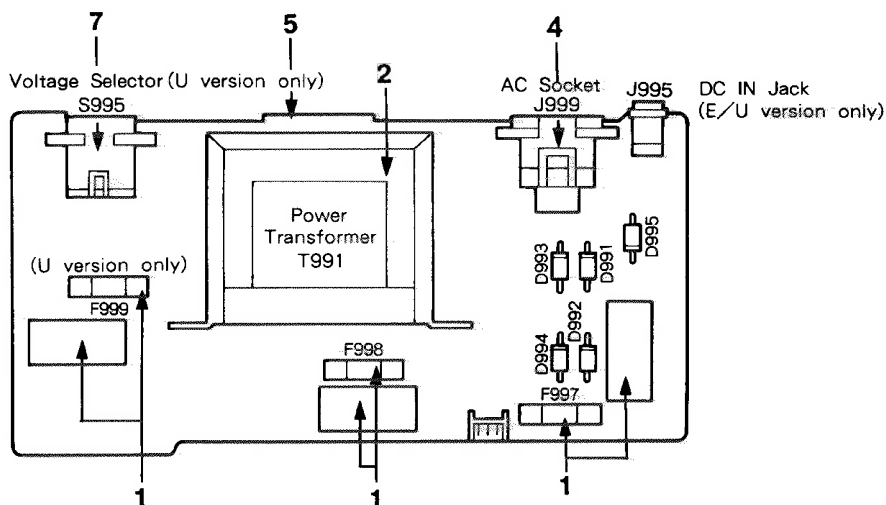
■ Item demanding special safety precautions(C/J version only)

1. Concerning the fuse caution letters (Written in french of "C" version) or graphic indications must be confirmed.
2. Before installation confirm the fuse capacity indication, (UL) or (CSA) marks on the fuse capacitor when installing, confirm if the fuse is held tightly with the fuse holder.

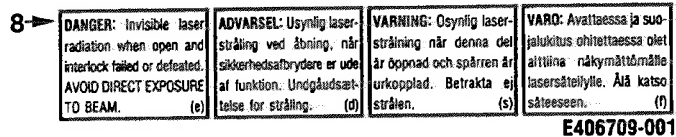
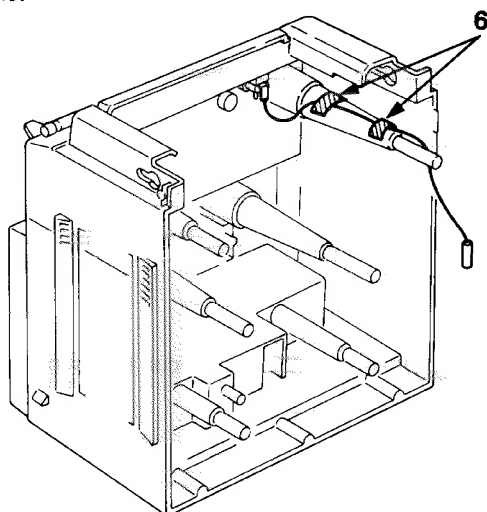
Version	REF.No.	Capacity & mark	Indication on P.C. board
C	F996	3A /250V	3A /250V
C	F997	3A /250V	3A /250V
C/J	F998	3A /250V	3A /250V
C/J	F999	400mA /250V	400mA /250V

3. Power transformer marking :5712538(J version : UL Approved number),VTP57P2 – 12J(C version:Parts No.)
The torque of the screw driver for the poewr transformor must be controlled.
4. Following parts are controlled as the heated parts. confirm that the flammable parts are lifted up the parts in ()must be controlled.
 - Diode:D991,D992, D993, D994 Transistor:Q901
 - Capacitor:C801,C995 • IC: IC801, Transistor: Q901, Heat sink
5. Concerning the AC socket, the next marking must be confirmed and to avoid print circuit board pattern damage. The AC socket must not float from print circuit board.
 - Marking HSC1566 (J/C version)
6. Concerning the primary terminal and the adjacent secondary terminal on the print circuit board toprovide proper creeping and spatial distance, solder must not protrude from soldering round.
7. Wires must be clamped or scoured at the locations shown in the figure so that the wire do not touch to live parts, moving part , hot part, or sharp edges.
8. Confirm the HHS label. (J version only)
9. Confirm the CSA mark is printed on the name plate. (C version only)
10. The FCC label must be attached .(J version only)
11. Confirm the caution mark on the rear cabinet.

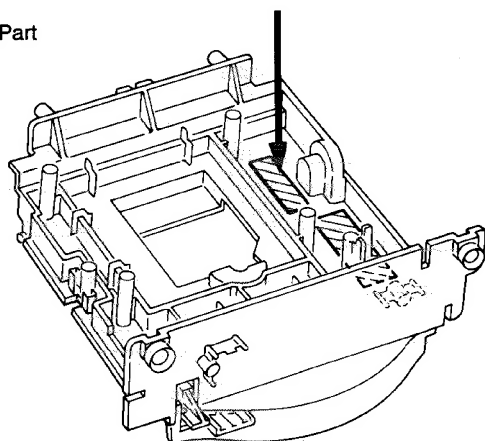
■ PC-X55 B/E/G/GI/VX/U



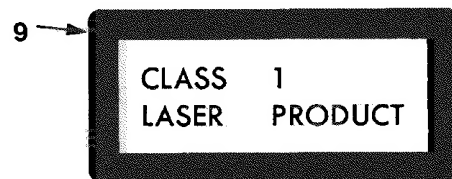
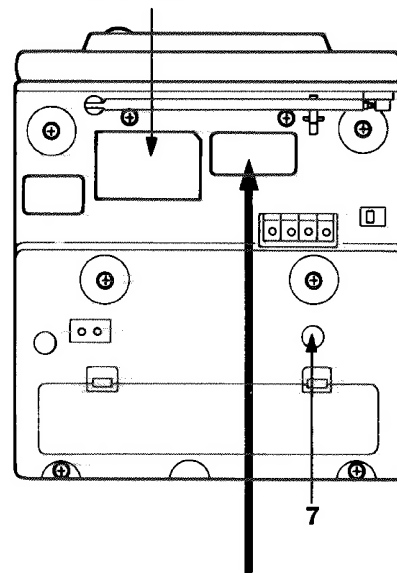
Rear Cabinet



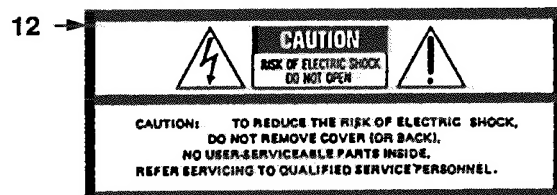
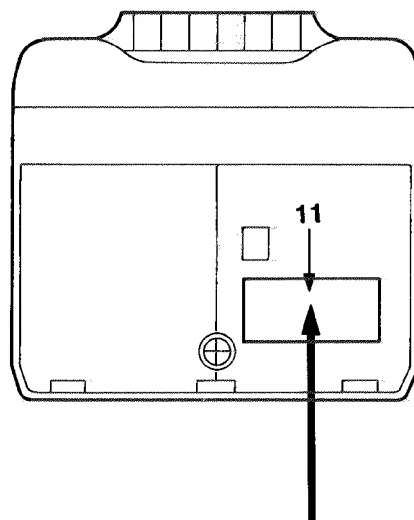
CD Player Part



Name Plate (10, 11)



Obs:
Apparaten innehåller laser
Komponent av höger laserklass
än klass 1.



■ Item demanding special safety precautions(B/E/G/GI//VX version and U version)

1. Before installation confirm the fuse capacity indication, (♡) or (\$) marks on the fuse capacitor when installing, confirm if the fuse is held tightly with the fuse holder. (U version only)

Version	REF. No.	Capacitor & mark	Indication on P.C. board
E/U	F997	T3.15A/250V	Fuse T3.15A LABEL
E/G/GI/B/VX/U	F998	T3.15A/250V	Fuse T3.15A LABEL
U	F999	500mA/250V	500mA /250V LABEL

2. Power transformer marking :VTP57P2 – 12I(B/E/GI/VX version: Parts number),
VTP57P2 – 17A (U version: Parts No.)

The torque of the screw driver for the poewr transformor must be controlled.

3. Following parts are controlled as the heated parts. confirm that the flammable parts are lifted up the parts in ()must be controlled.

•Diode:D991,D992, D993, D994 Transistor:Q901

•Capacitor:C801,C995 • IC: IC801, Transistor: Q901, Heat sink

4. Concerning the AC socket, the next marking must be confirmed and to avoid print circuit board pattern damage. The AC socket must not float from print circuit board.

•MarkingHSC1466

5. Concerning the primary terminal and the adjacent secondary terminal on the print circuit board toprovide proper creeping and spatial distance, solder must not protrude from soldering round.

6. Wires must be clamped or scured at the locations shown in the figure so that the wire do not touch to live parts, moving part , hot part, or sharp edges.

7. Confirm the voltage stamp 110Vto 120V and 220V to 240V on the AC slider.

110V to 127V and 220V to 240V(U version only)

8. The laser caution must be attached on the CD part. (Except U Version)

9. The lclass 1 label must be attached . (Except U Version)

10. Confirm the BEAB Approved mark is printed on the name plate .(B version only)

11. Confirm the FTZ mark is printed on the name plate. (G version only)

12. Confirm the caution mark on the rear cabinet.

3. Main Features

1. **Portable system incorporating multi-function CD player**
 - CD player with program play of up to 20 tunes/repeat play function.
 - Digital LCD (Liquid Crystal Display) indicates the playback time of each tune, and the total playback time of the programmed tunes.
 - 8-cm (3-3/16") "CD single" capability.
2. **Synchro-record start for CD recording convenience**
3. **Full auto-stop mechanism**
4. **Multi-Bass Horn circuit for low-frequency sound reproduction**
5. **Mixing mic jack (U)**
6. **Ext. DC IN jack (E/U)**

4. Specifications

Compact disc player section

Type	: Compact disc player
Signal detection system	: Non-contact optical pickup (semiconductor laser)
Number of channels	: 2 channels (stereo)
Frequency response	: 20 Hz – 20,000 Hz
Signal-to-noise ratio	: 76 dB
Wow & flutter	: Less than measurable limit

Radio section

Frequency ranges	: FM 88 – 108 MHz (B/C/E/G/J/U)
	: FM 87.5 – 108 MHz (GI)
	: FM 65 – 108 MHz (VX)
	: AM 540 – 1,700 kHz (C/J)
	: AM 540 – 1,600 kHz (B/E/G/VX/U)
	: 526 – 1,607 kHz (GI)
	: LW 150 – 280 kHz (B/E/G/VX)
	: LW 148 – 284 kHz (GI)
	: SW 6 – 18 MHz (U)
Antennas	: Telescopic antenna for FM, SW
	: Ferrite core antenna for AM/MW, LW

Tape deck section

Track system	: 4-track 2-channel stereo
Motor	: Electronic governor DC motor for capstan
Heads	: Hard permalloy head (for recording/ playback), Magnetic head for erasure
Frequency response	: 80 – 12,500 Hz
Wow & flutter	: 0.15 % (WRMS)
Fast wind time	: Approx. 120 sec. (C-60 cassette)

General

Power output	: 3.5 watts per channel min. RMS, at 3 ohms from 150 Hz to 15 kHz with no more than 10% total harmonic distortion (PC-X55J) Max. 16 W (8 W + 8 W) at 3 ohms (PC-X55C)
Output terminals	: PHONES x 1 (Output level: 0-15 mW/32 Ω Matching impedance: 16 Ω-1 kΩ)
Input terminal (U)	: MIXING MIC x 1 (minimum input level 2.5 mV/200 – 2 kΩ)
Power supply	: AC 120 V, 60 Hz (C/J) AC 230 V, 50/60 Hz (B/E/G/GI/VX) AC 110 – 127/220 – 240 V, 50Hz (U) EXT. DC IN 12 V (E/U) DC 12 V (8 "D" batteries)
Power consumption	: 17 W (with POWER ON) (C/J) 14W (with POWER ON) (B/E/G/GI/VX) 2W (with POWER STANDBY)
Dimensions	: 587(W) x 256(H) x 238(D) mm (23-1/8" x 10-1/8" x 9-3/8") including knobs
Weight	: Approx. 5.7 kg (12.6 lbs) (without batteries) Approx. 6.5 kg (14.4 lbs) (with batteries)
Accessories provided	: AC power cord Conti. plug (U)

Speaker Section (each unit)

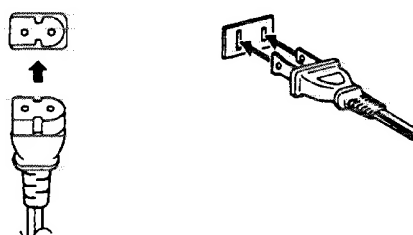
Speakers	: 10 cm (3-15/16") x 1
Impedance	: 3 Ω
Dimensions	: 177(W) x 237(H) x 202(D) mm (7" x 9-3/8" x 8")
Weight	: Approx. 1.2 kg (2.7 lbs)

Design and specifications are subject to change without notice.

POWER SUPPLY

A. Operation on household AC (C/J version only)

- Connect the AC power cord.



- The provided AC power cord for this unit has certain one-way direction connections to prevent electric shock. Refer to the illustration for correct connection. (PC-X55J/C).

CAUTIONS:

1. **ONLY USE WITH JVC POWER CORD PROVIDED WITH THIS UNIT TO AVOID MALFUNCTION OR DAMAGE TO THE UNIT. REMOVE BATTERIES WHEN USING THE POWER CORD.**
2. **BE SURE TO UNPLUG THE POWER CORD FROM THE OUTLET WHEN GOING OUT OR WHEN THE UNIT IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.**

IMPORTANT (In the United Kingdom) Mains Supply (AC 240 V~, 50 Hz only)

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:



As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

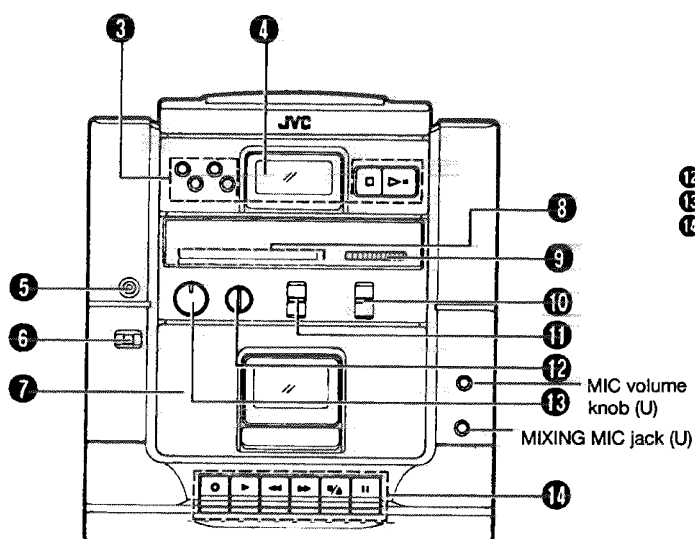
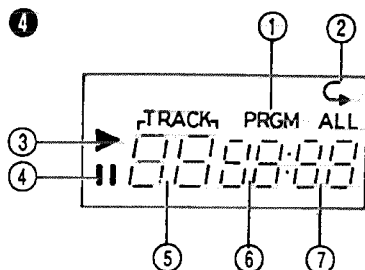
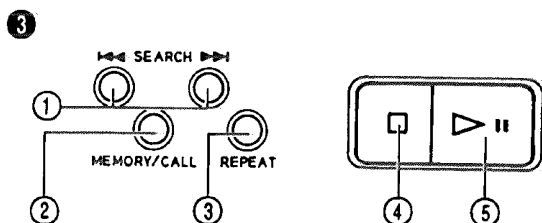
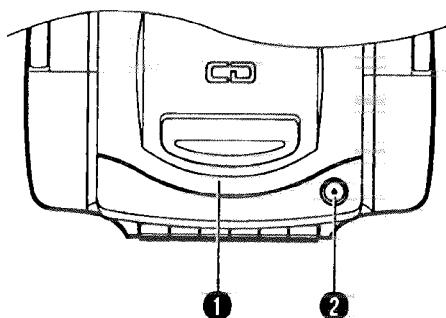
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF IN DOUBT – CONSULT A COMPETENT ELECTRICIAN.

5. Instructions (Extract)

NAMES OF PARTS AND THEIR FUNCTIONS

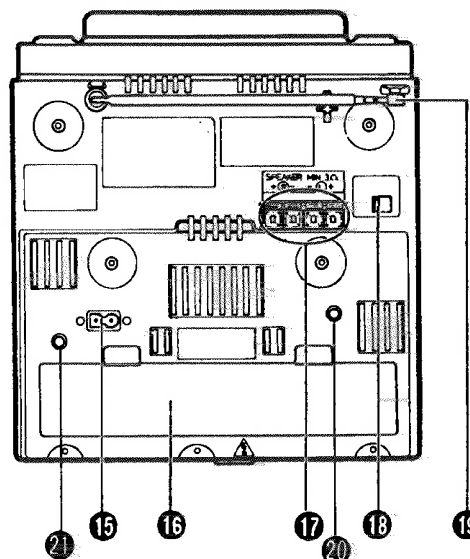
• Top and Front panels



- 1 Disc holder
- 2 Disc holder open button (▲)
- 3 CD operation buttons
 - 1 SEARCH (◀▶/▶▶) buttons
 - 2 MEMORY/CALL button
 - 3 REPEAT button
 - 4 Stop/clear (□) button
 - 5 Play/pause (▶||) button
- 4 Display window (CD player section)
 - 1 Program mode indicator (PRGM)
 - 2 Repeat playback indicator (◀ ALL)
 - 3 Playback indicator (▶)
 - 4 Pause indicator (||)
 - 5 Track (Tune) number display
 - 6 Program order number/Time (minute) display
 - 7 Time (second) display
- 5 PHONES jack (3.5 mm dia. stereo mini)
Connect headphones (with impedance 16 Ω - 1 kΩ) to this jack. The speakers are automatically switched off when the headphones are connected.
- 6 MULTI-BASS HORN button
on (—):
Set to this position when listening to MULTI-BASS HORN sound.
off (⏏):
Set to this position when MULTI-BASS HORN sound is not required.
- 7 Cassette holder
- 8 Dial scale
- 9 TUNING knob
- 10 BAND switch
FM MONO:
Set to this position when FM stereo reception is obscured by noise.
FM STEREO:
Set to this position to listen to or record an FM stereo broadcast.
AM: C/J, LW (B/E/G/GI/VX), SW (U)
Set to this position to listen to or record an AM broadcast.
- 11 FUNCTION switch
CD:
Set to this position when listening to or recording from a CD.
TUNER:
Set to this position when listening to or recording from the radio.
TAPE/CD-TUNER STANDBY:
Set to this position when listening to a cassette or when switching off the CD and TUNER mode.
- 12 TONE control
- 13 VOLUME control
- 14 Cassette operation buttons
○ REC:
Press this button with the ▶ PLAY button to start recording.
▶ PLAY:
Press to play the tape.
◀◀ REW:
Press to rewind the tape rapidly.
▶▶ FF:
Press to wind the tape forward rapidly.
■/▲ STOP/EJECT:
Press to stop the tape. Pressing this button when the tape stops opens the cassette holder.
|| PAUSE:
Press to stop the tape temporarily. Press again to release the pause mode.

• Rear panel

- 15 AC IN (AC input) jack
- 16 Battery compartment cover
- 17 SPEAKER terminals
Connect the provided speakers to these terminals.
- 18 BEAT CUT switch
- 19 Telescopic antenna
- 20 Voltage selector (U only)
- 21 DC IN jack (E/U only)

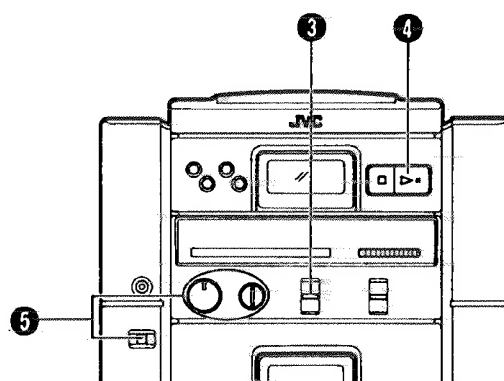
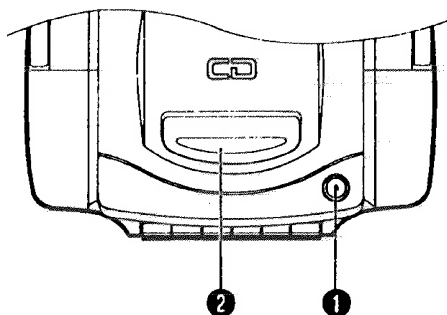


PLAYING COMPACT DISCS

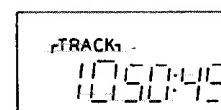
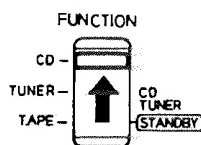


Playing an entire disc ... The following example assumes a compact disc with 10 tunes and a total playing time of 50 minutes 45 seconds.

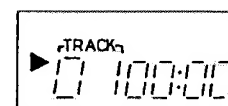
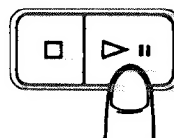
Operate in the order shown



- 1 Press to open the disc holder.
- 2 Load a disc with the label side facing up and close the disc holder
- 3 Set to the CD mode.
 - When a CD is first loaded, the total number of tracks (tunes) and total playing time are displayed.



- 4 Press to start play.
 - The track (tune) number and playback time are displayed.



- 5 Adjust.

- 8-cm (3-3/16") compact discs can be used in this unit without an adapter.

Skip playback

- During playback, it is possible to skip forward to the beginning of the next tune or back to the beginning of the tune being played or the previous tune; when the beginning of the required tune has been located, play starts automatically.

To listen to the next tune ...

Press the ►► button once to skip to the beginning of the next tune.

To listen to the previous tune ...

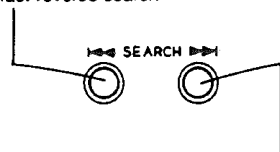
Press the ◀◀ button to skip to the beginning of the tune being played back and press again to skip to the beginning of the previous tune.

Search playback

(to locate the required position on the disc)

- The required position can be located using fast-forward or reverse search while playing a disc.

Keep pressing for fast-reverse search

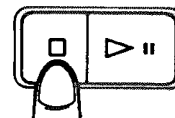


Keep pressing for fast-forward search

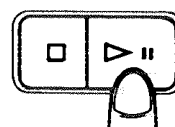
- Hold down the button; search play starts slowly and then gradually increases in speed.
- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

To stop play

- To stop in the middle of a disc**
During playback, press the stop/clear (◻) button to stop play.

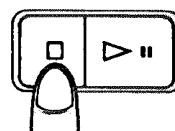


- To stop a disc temporarily**
Press the play/pause (▶||) button to stop play temporarily. When pressed again, play resumes from the point where it was paused.



Caution:

- To change discs, press the stop/clear (◻) button; check that the disc has stopped rotating completely before unloading it.



Notes:

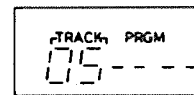
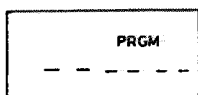
- The following indication may be shown when a disc is dirty or scratched, or when the disc is loaded upside down. In such a case, check the disc and insert again after cleaning the disc or turning it over.



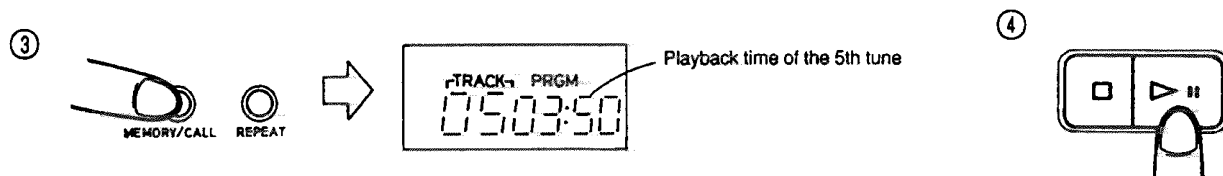
- Do not use the unit at excessive high or low temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).
- After playback, unload the disc and close the disc holder.
- If mistracking occurs during play, lower the volume.
- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (i.e. in a car travelling on a rough road).

Programmed playback

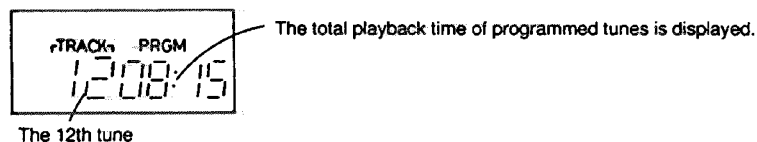
- Up to 20 tunes can be programmed to be played in any required order. The total playing time of programmed tunes is displayed (up to 99 minutes, 59 seconds).



When designating the 5th tune



To designate the 12th tune.



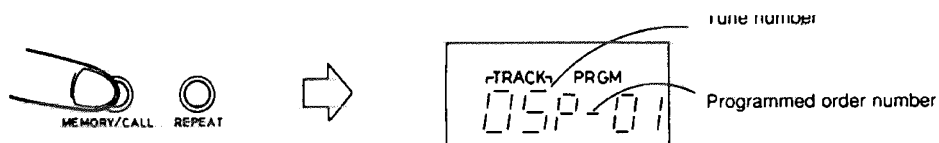
- ① Press the MEMORY/CALL button to set to the programming mode.
- ② Press to designate the required track number.
 - To count down the track number, press the ◀◀ button.
- ③ Press the MEMORY/CALL button to program the track (tune) number.
 - Repeat steps ② and ③ to program other tunes.
- ④ Press the play/pause (▶||) button when programming is completed. Programmed playback starts.

To clear programmed tunes ...

Press the stop/clear (◻) button before playback. During programmed playback, press this button twice. When the disc holder is opened, the programmed tunes are automatically cleared.

To confirm the details of program

Press the MEMORY/CALL button for more than 2 seconds: the tunes making up the program will be displayed in the programmed order.



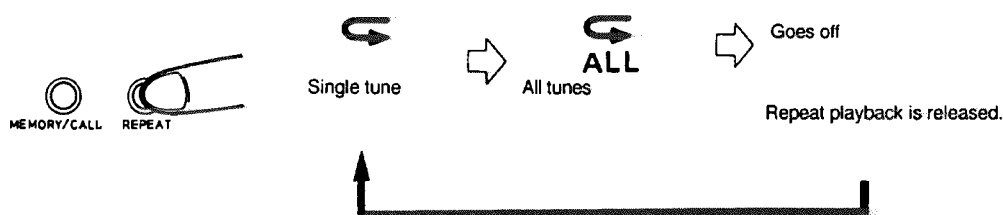
Note:

When a track number that is higher than 21 is programmed for a disc which contains more than 21 tunes, the track No. is displayed, however, "---:--" is shown in the total playback time.

Repeat playback

Press the REPEAT button before or during play. A single tune or all tunes can be repeated.

Whether a single tune or all tunes are to be repeated can be specified. Each time the REPEAT button is pressed, the mode will change from a single tune (◀), to all the tunes (◀ ALL), to the clear mode, in this order.

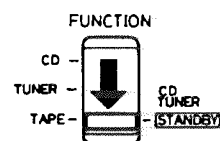
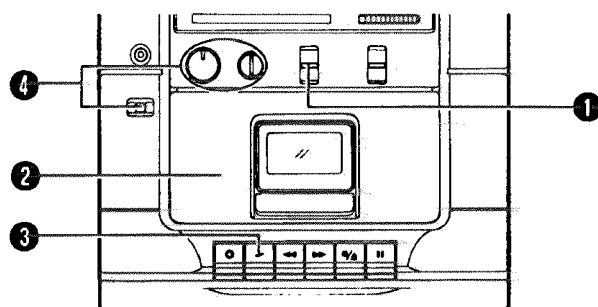


- **Repeat playback of a single tune (⇐)**
The tune being played back will be heard repeatedly.
- **Repeat playback of all tunes (⇐ ALL)**
When playing back an entire disc or programmed tunes, all tunes or the programmed tunes will be heard repeatedly.

CASSETTE PLAYBACK

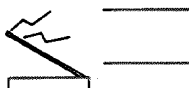


Operate in the order shown

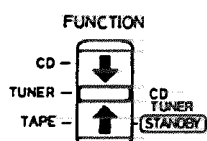
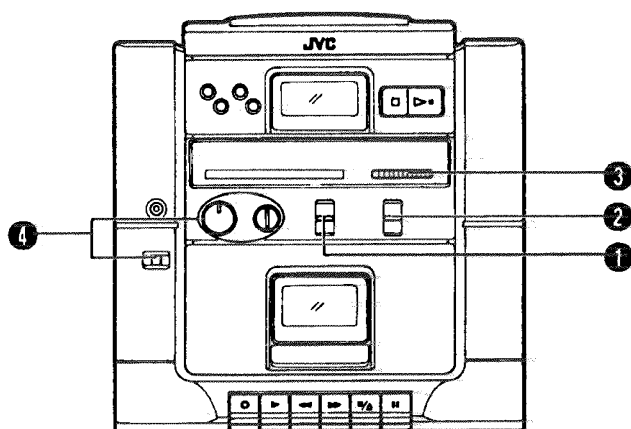


- 1 Set to TAPE.
- 2 Load a cassette. (Use normal tape for this unit.)
- 3 Press to start playback.
- 4 Adjust.

RADIO RECEPTION



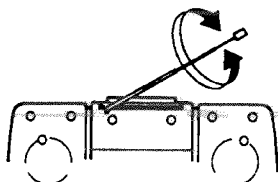
Operate in the order shown



- 1 Set to TUNER.
- 2 Select the band.
- 3 Tune to the required station.
- 4 Adjust.

Using the antennas

SW
FM



LW
AM



Note:

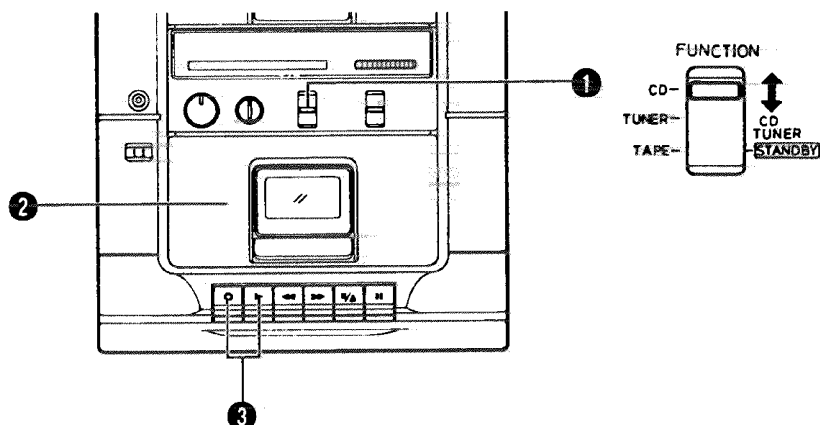
The built-in ferrite core antenna can pick up interference from television receivers in the neighborhood and thereby disturb AM reception.

RECORDING



- In recording, the ALC circuit automatically optimizes the recording level; adjustment of the recording level is unnecessary.

Operate in order shown



- 1 Select the recording source.
 - When recording from the radio TUNER
 - When recording from the CD player CD
- 2 Load a cassette. (See the note below.)
- 3 Press the ○ REC and ► PLAY buttons simultaneously.

Note:

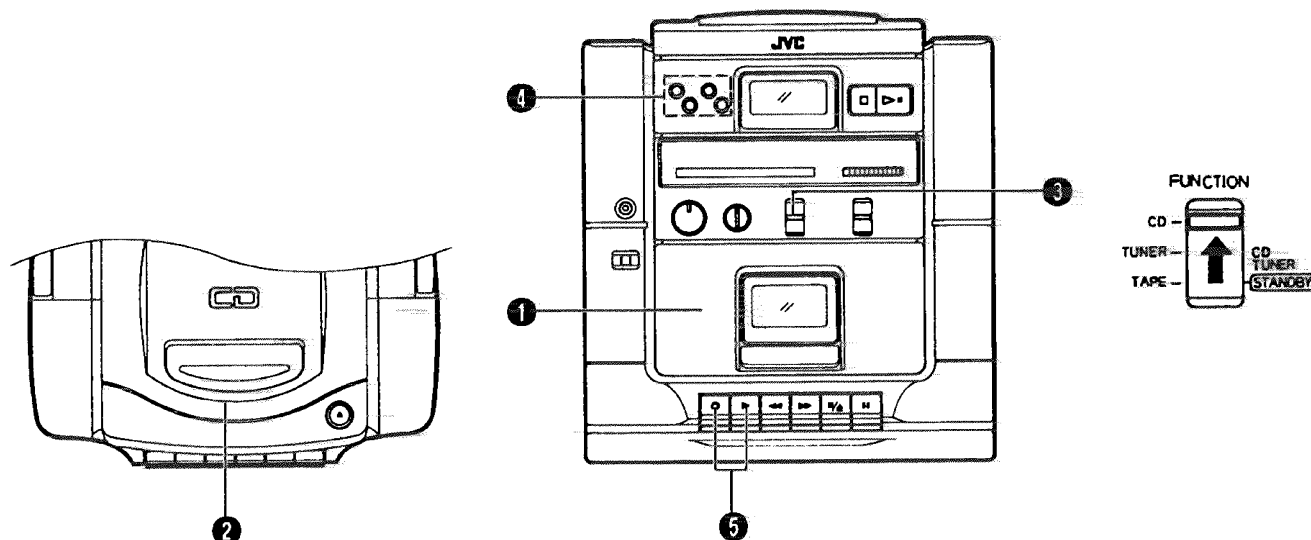
- The recording/playback characteristics of this unit are those of normal tape. Normal tape has different characteristics from CrO₂ and metal tapes.

It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.

Synchronized recording with the CD player

- In this system, the CD player starts playback when deck enters the recording mode.

Operate in the order shown



- ① Load a cassette.
 - ② Load a disc.
 - ③ Set to CD.
 - ④ When programmed playback is required, program the required tunes.
 - ⑤ Press the ○ REC button with the ► PLAY button; synchronized recording will start.
- Non-recorded sections of approx. 4 seconds are automatically left between tunes.
 - When the tape reaches the end first, the CD player stops automatically; when the CD player stops first, the tape continues running. In this case, press the ■/▲ STOP/EJECT button to stop the tape.

- When automatic spacing between tunes is not required...

Perform the following after finishing the previous operation (① to ⑤).

- ① Press the play/pause (►||) button of the CD player twice. The CD player enters the pause mode.
- ② Press the ○ REC and ► PLAY buttons simultaneously. Now, the CD player starts playback simultaneously.

|| PAUSE button

First of all, press the || PAUSE button. Then, press the ○ REC and ► PLAY buttons, thus entering the record-pause (standby) mode. After that re-press the || PAUSE button at the exact moment you want to start recording. This releases the tape to begin recording at a precise moment.

- Do not leave the unit in pause mode for more than a few minutes. Instead, push the ■/▲ STOP/EJECT button and set the FUNCTION switch to TAPE/CD-TUNER STANDBY.

Full auto-stop mechanism

When the tape reaches either end during the recording/playback and fast forward or rewinding mode, the tape stops automatically.

Erasing

When recording on a pre-recorded tape, the previous recording is automatically erased and only the new material can be heard when the tape is played.

To erase a tape without making a new recording...

Follow the section "RECORDING" but in step ①, set the FUNCTION switch to TAPE then perform recording to erase the tape.

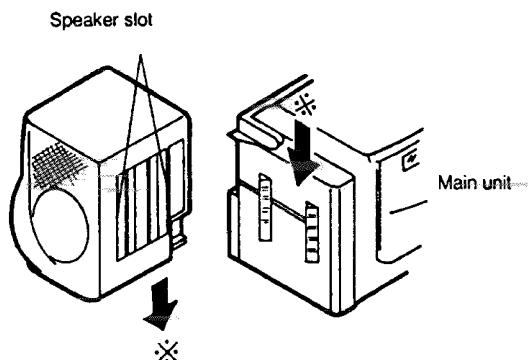
BEAT CUT switch

When recording an AM broadcast, beats may be produced which are not heard when listening to the broadcast. In such a case, set this switch so that the beats are eliminated. Normally set this switch to "NORM 1".

ATTACHING/DETACHING THE SPEAKERS

When using the speakers attached to the main unit
Hold with the bottom of the speaker against the top of the main unit and press down on the speaker to attach it.

Press the speaker down with the speaker and main unit aligned.

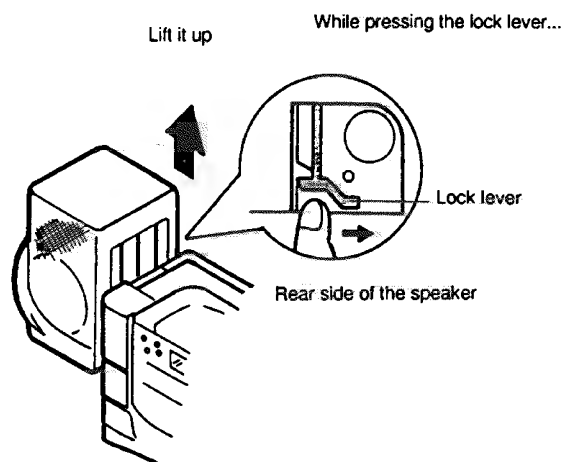


Note:

Since the speakers sound differently according to where they are placed, carefully place them for optimal effect within the length of the provided speaker cords. It is recommended that the left and right speakers be placed symmetrically in relation to the main unit.

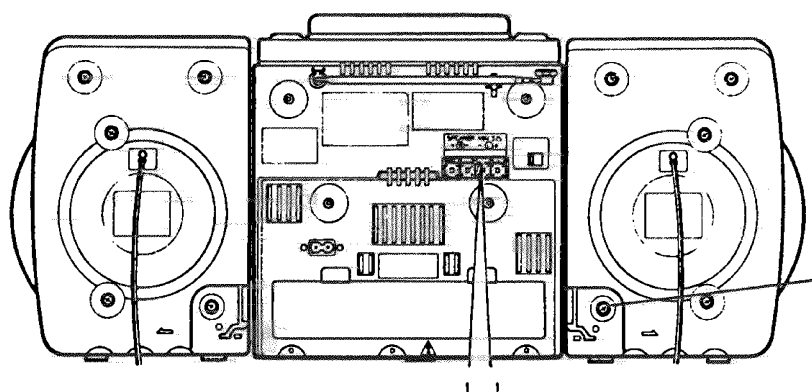
When using the speakers detached from the main unit

Lift the speaker up to detach from the main unit by pressing the lock lever at the rear bottom of speaker in the direction of the arrow.



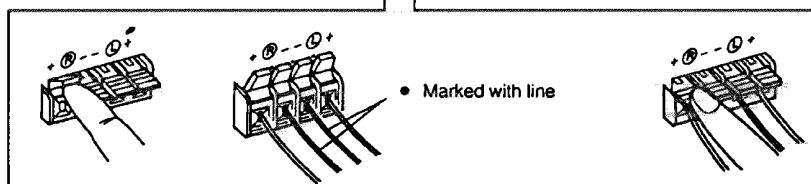
CONNECTIONS

- Do not switch the power on until all the connections are completed.



- After connecting the speaker cords, bundle any slack into the space for the speaker cords in the rear panel.

- Space for speaker cords



- When connecting the speaker cords, connect the one marked with a line to the "-" terminal first.

6. Location of Main Parts

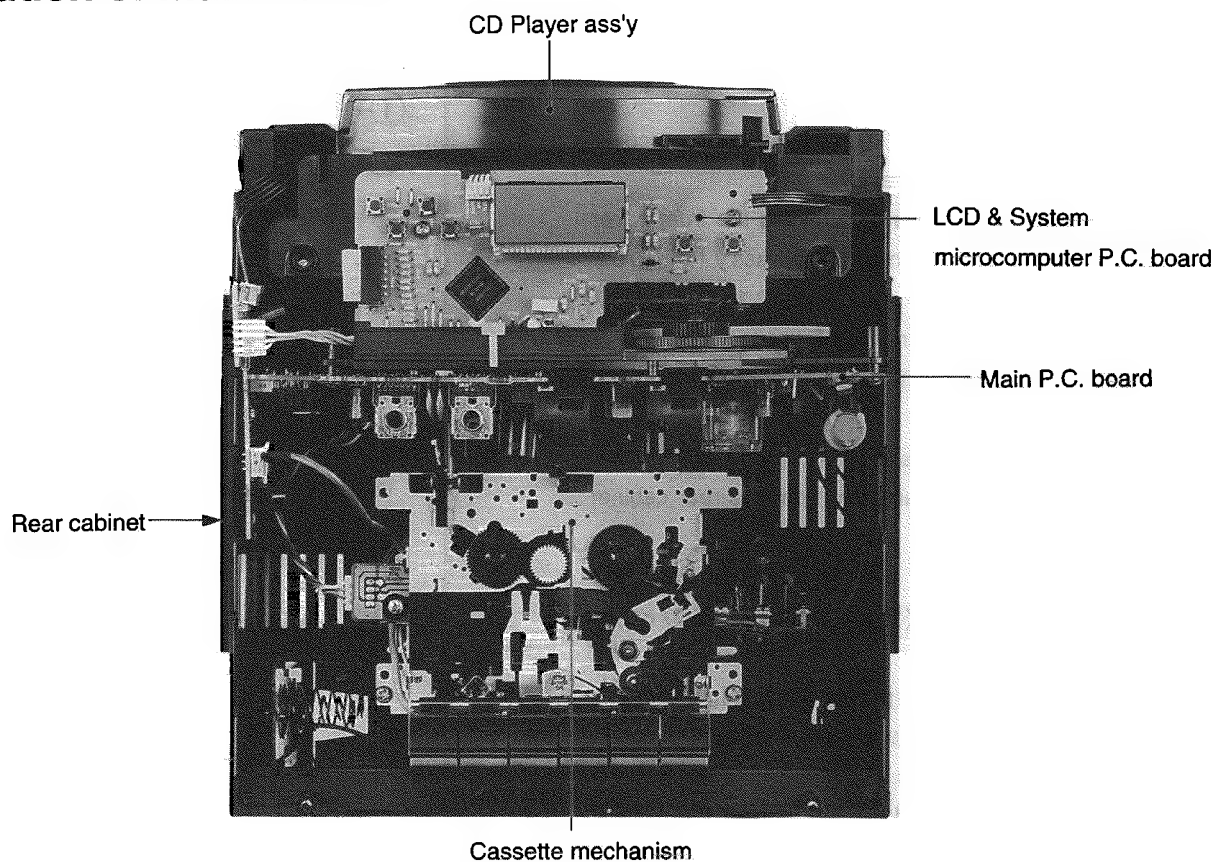


Fig. 6-1

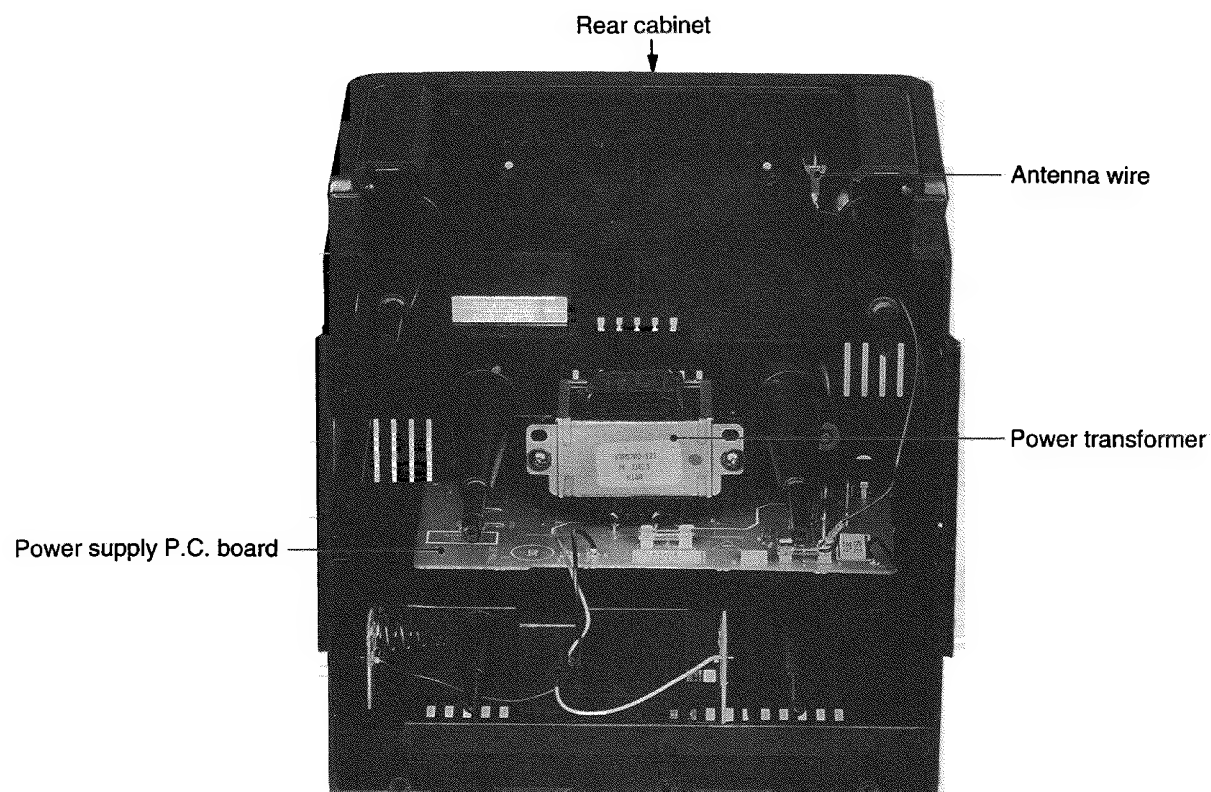


Fig. 6-2

7. Removal of Main Parts

■ How to remove the front cover ass'y and rear cabinet ass'y (Fig.7 - 1 ~ 4)

1. Remove the four screws ① retaining the front cover ass'y to the rear cabinet ass'y.
2. Remove the two screws ② retaining the front cover ass'y and the cassette mechanism ass'y to the rear cabinet ass'y.
3. Pull out the VOLUME and TONE knobs.
4. Press the STOP/EJECT button to open the cassette door.
5. Remove the two screws ③.
6. Remove the front cover ass'y from the rear cabinet ass'y.
7. Disconnect the 3 pin connector CN850 from the mixing mic.P.C. board. (Fig. 7 - 6 , PC - X55U only)

■ How to remove the CD player ass'y. (Fig.7 - 1, 5)

1. Remove the two screws ④ retaining the CD player ass'y from the back side.
2. From the connector CN351, disconnect the parallel wire outgoing from CD amplifier P.C. board and 4 pin connector CN352 outgoing from the LCD/System microcomputer P.C. board, on the CD mute P.C. board.
3. Lift up the CD player ass'y a little and draw it out towards you.

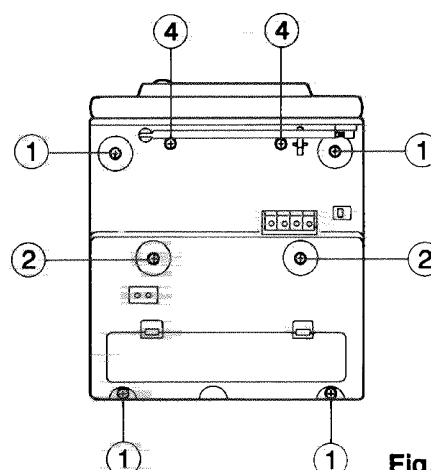


Fig. 7 - 1

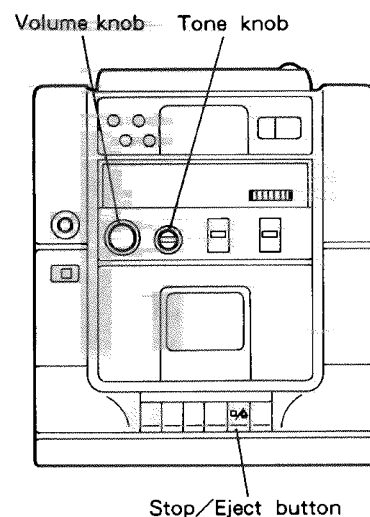


Fig. 7 - 2

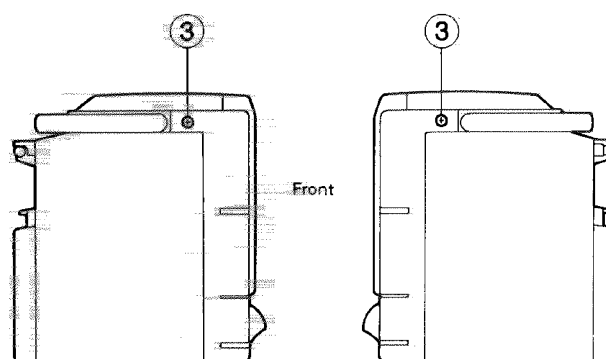


Fig. 7 - 3

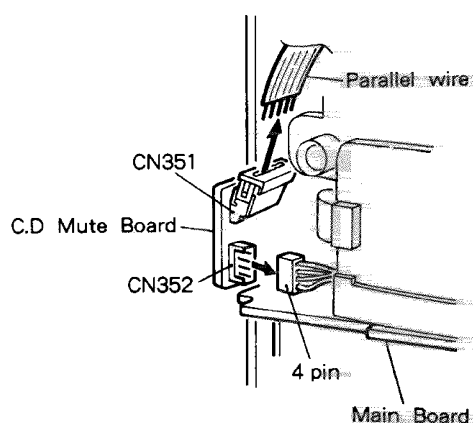


Fig. 7 - 5

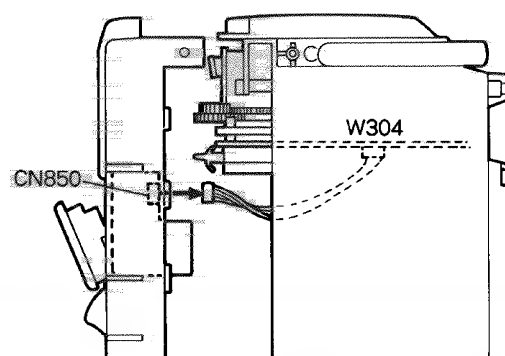


Fig. 7 - 4

■How to remove the cassette mechanism ass'y and main P.C. board ass'y(Fig.7 – 6)

1. Remove the two screws ⑤ retaining the cassette mechanism ass'y.
2. Disconnect the connector CN303 on the REC/PB switch P.C. board.
3. Disconnect the connector CN301 and CN302 on the main P.C. board.
4. Pull out the wire outgoing from FM antenna on the main P.C. board.
5. Disconnect the 2 pin connector outgoing from the main P.C. board from the connector CN997 on the power supply P.C. board. And then disengage the wires from the wire clamp equipped with power supply P.C. board.
6. Draw out the main P.C. board with the cassette mechanism ass'y from the rear cabinet ass'y.

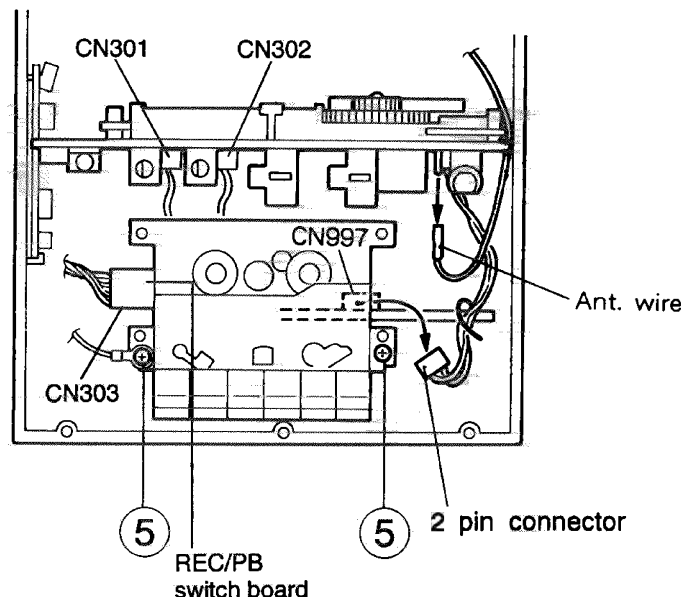


Fig. 7-6

■ How to reassemble the tuner chassis assembly (Fig.7 – 7)

1. After the tuner chassis (47) is assembled to the Main P.C. board, insert the needle (53) into the rail (A) of the tuner chassis from the right side and fit the needle end with the pointer into the rail (B).
2. Fit the tuning knob (52) to the tuner chassis.
3. When assembling the dial drum (51) to the tuner chassis, place it so that the triangle mark on the dial drum and that on the tuner chassis face each other as shown in Fig. 7-7-a.

■ How to reassemble the fine tuning holder assembly (PC-X55U only Fig. 7-7-b)

1. Apply grease (G501) inside the rib on the fine tuning holder as indicated in the figure.
2. Fit the fine tuning knob (94) to the fine tuning holder (95).

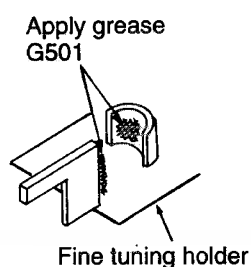
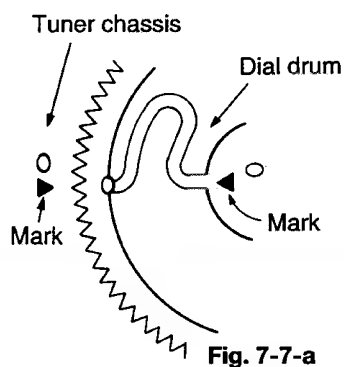


Fig. 7-7-b

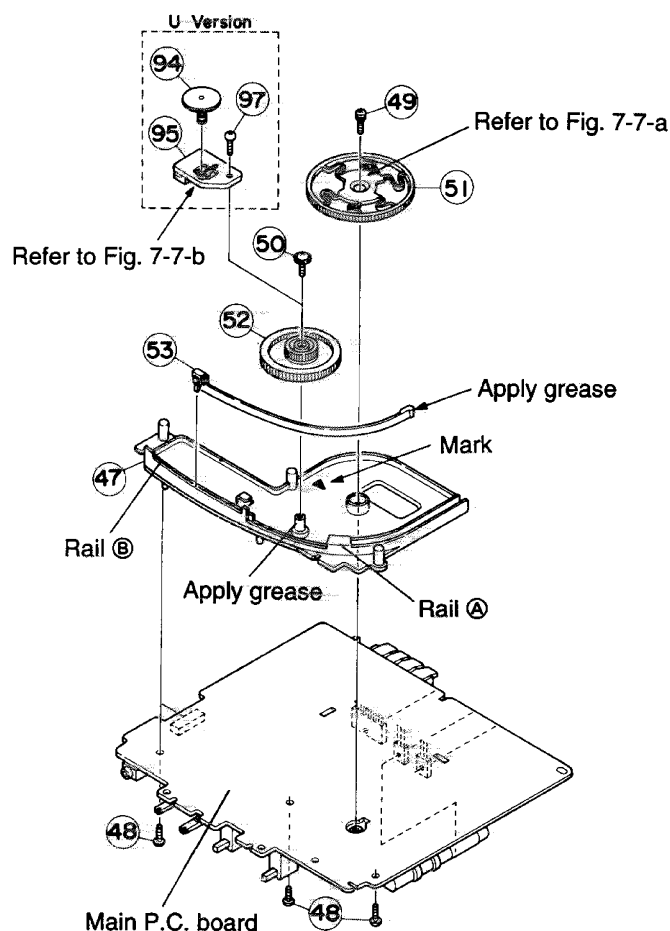
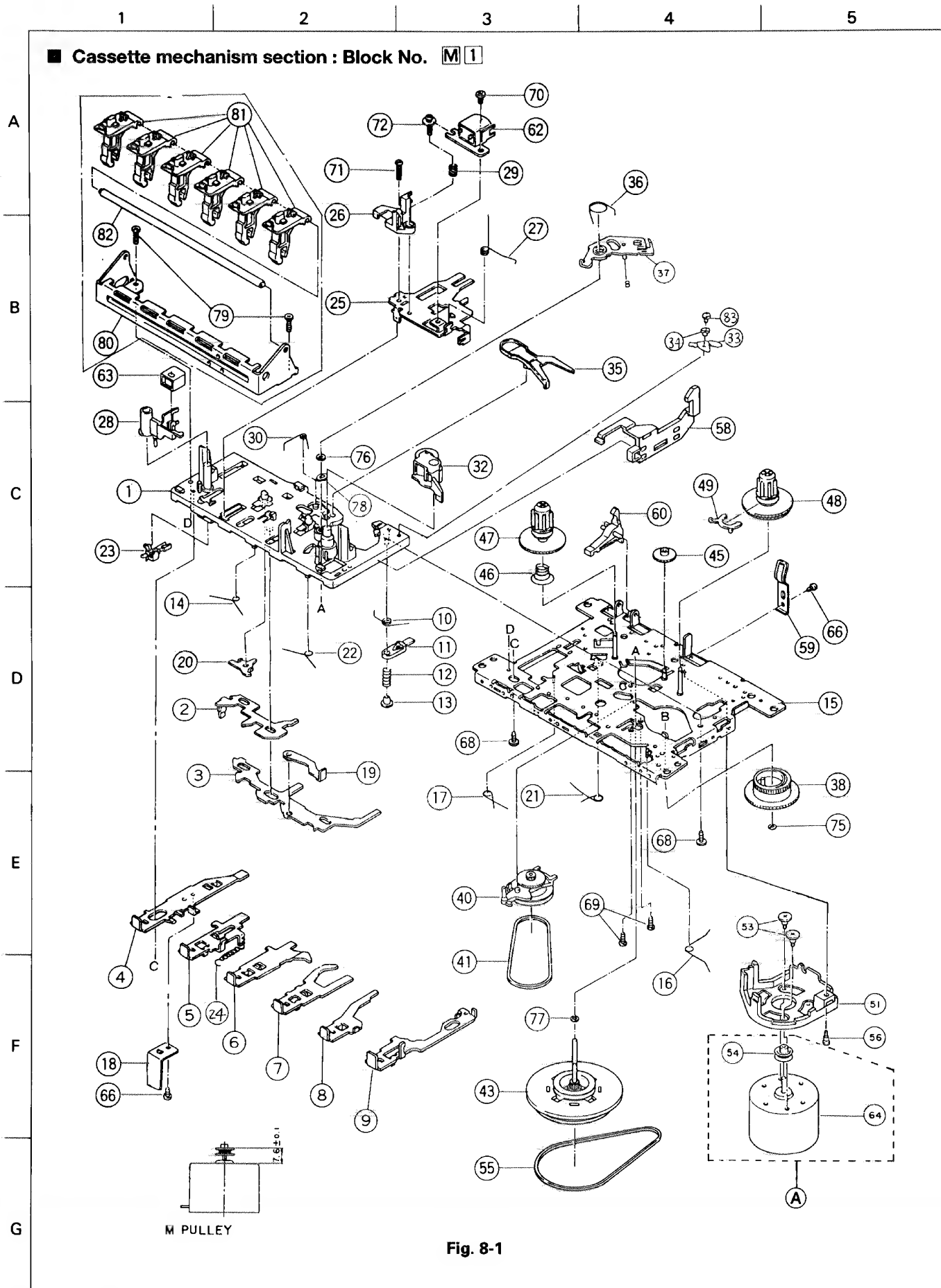


Fig. 7-7

8. Analytic Drawing and Parts List



● Cassette mechanism parts list

BLOCK NO. M1MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	192112328T	DC MOTOR	REF.54,64	1		
1	192114301ZT	BASE ASS'Y		1		
2	19211409T	SW ACTUATOR		1		
3	19211408T	PUSH BUTTON		1		
4	19211422T	REC BUTTON		1		
5	19211484T	PLAY BUTTON		1		
6	19211424T	REW BUTTON		1		
7	19211425T	FF BUTTON LEVER		1		
8	19211426T	STOP BUTTON		1		
9	19211461T	PAUSE BUTTON		1		
10	19211413T	P CTRL SPRING		1		
11	19211455T	PAUSE LEVER (E)		1		
12	19211412T	PAUSE LEVER SP		1		
13	19211411T	PAUSE STOPPER		1		
14	19211414T	BUTTON LEVER SP		1		
15	192101501ZT	CHASIS ASS'Y		1		
16	19211416T	E ACTUATOR SP		1		
17	19211417T	P.S. LEVER SP		1		
18	15100212T	REC SP.PLATE		1		
19	182101159T	E KICK LEVER		1		
20	19211420T	PR STOPPER	MSW-1541T P.BUTTON LEVER	1		
21	19211421T	REC BUTTON L SP		1		
22	19211415T	BUT.LEVER SP		1		
23	MSW-1541T	LEAF SWITCH		1		
24	18210150T	SPRING		1		
25	19210311T	HEAD PANEL		1		
26	19210304AT	HEAD BASE		1		
27	19210309T	PANEL P SPRING		1		
28	19210305T	MG ARM		1		
29	18210307T	AZIMUTH SPRING		1		
30	19211418AT	M CTRL SPRING		1		
32	192104309T	P.ROLLER ARM AY		1		
33	19211434T	CONTROL ARM		1		
34	19211437T	COLLAR		1		
35	19212604TT	SENSING LEVER		1		
36	19212605T	GEAR PLATE SP		1		
37	192126503T	GEAR PLATE ASSY		1		
38	19212602T	CAM GEAR		1		
40	192107304T	RF CLUTCH ASS'Y		1		
41	18210711T	RF BELT		1		
43	192109304ZT	FLYWHEEL ASS'Y		1		
45	18211070T	FF GEAR		1		
46	18211099T	BACK TENSION SP		1		
47	192105304T	SUPPLY REEL		1		
48	192105303T	TAKE UP REEL AY		1		
49	19210506T	SENSOR		1		
51	18211204T	MOTOR BRACKET		1		
53	19211202T	MOTOR CLR.SCREW		2		
54	19211250T	MOTOR PULLEY		1		
55	182112138T	MAIN BELT		1		
56	19211203T	MB SCREW		1		
58	19211302T	EJECT SLIDE		1		
59	18291001T	PACK SPRING		1		
60	18211069T	RECORD SAFETY		1		

BLOCK NO.

M1	M			
----	---	--	--	--

[illegible]

1

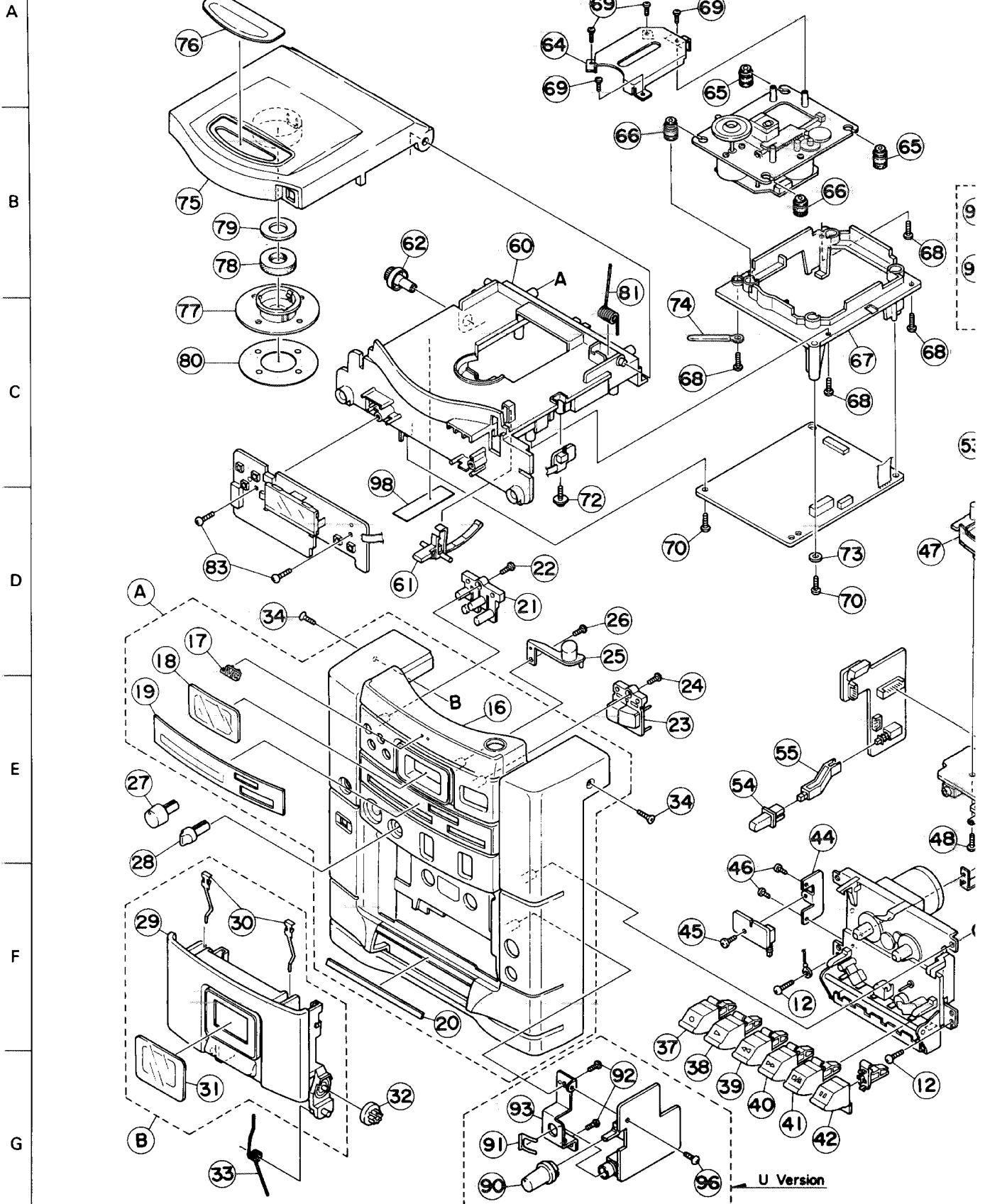
2

3

4

5

■ Enclosure assembly section : Block No. **M 2**



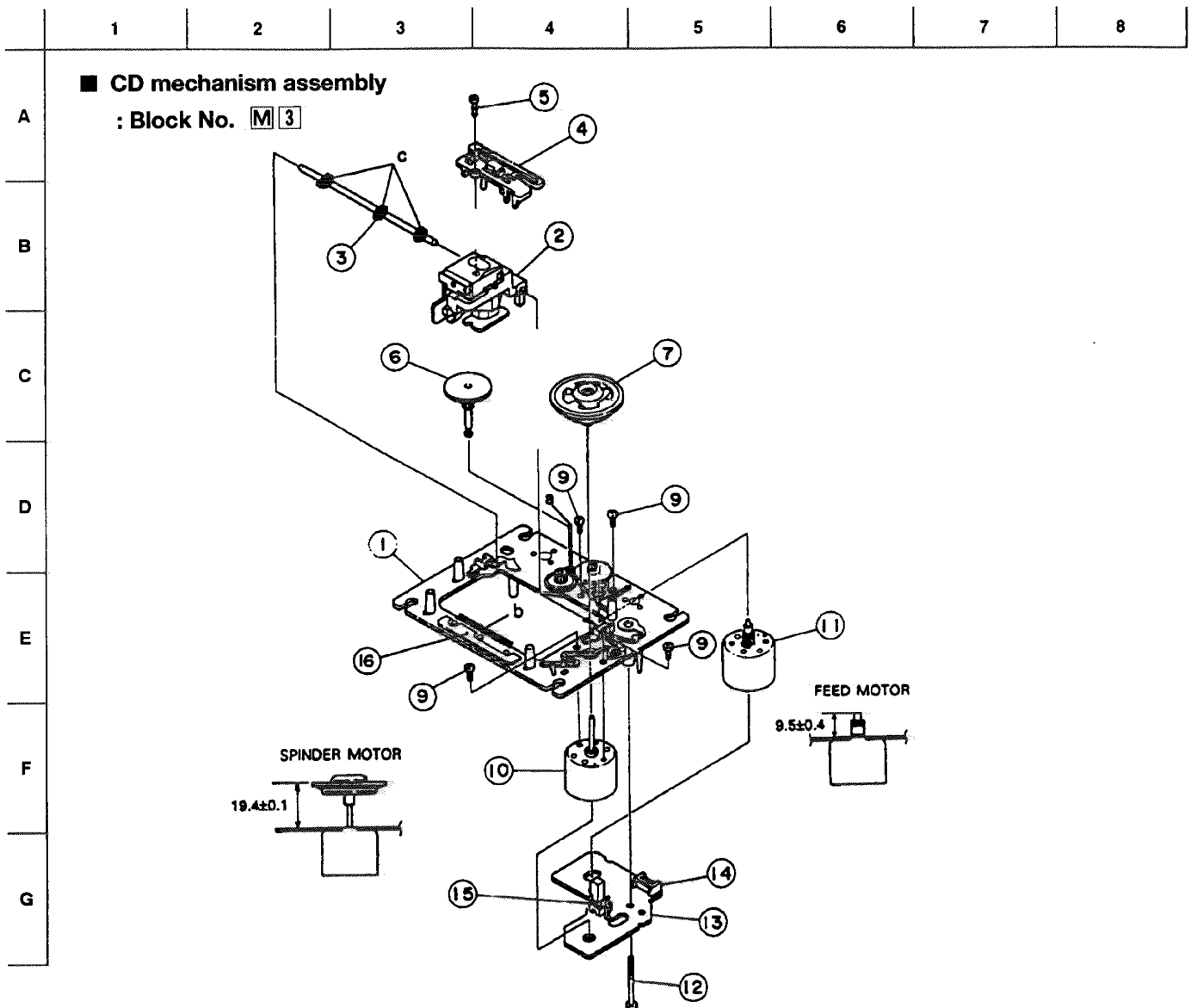
● Enclosure assembly parts list

BLOCK NO. M2MM [] [] []

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	ZCPRX55J-FB	F.CABINET ASSY	REF.16-20	1	J,C	
	ZCPRX55U-FB	F.CABINET ASSY	REF.16-20	1	U	
	ZCPRX55B-FB	F.CABINET ASSY	REF.16-20	1	B,E,G	
	ZCPRX55GI-FB	F.CABINET ASSY	REF.16-20	1	GI	
	ZCPRX55VX-FB	F.CABINET ASSY	REF.16-20	1	VX	
B	ZCPRX55K-CB	CASSETTE CASE	REF.29-31	1		
1	FMJC1001-001UL	REAR CABINET		1	J,C	
	FMJC1001-002	REAR CABINET		1	E	
	FMJC1001-003	REAR CABINET		1	B,G,GI,VX	
	FMJC1001-004	REAR CABINET		1	U	
2	FMJH2001-001	HANDLE		1		
3	VJC2003-025	BATT.COVER		1		
4	FMJA3001-00A(D)	ROD ANT ASSY		1		
6	VYH5012-005SS	TERMINAL LUG		1		
7	SDSP3016N	SCREW	FOR ANT	1		
8	VYH5657-001	BATTERY SPRING		1		
9	GBSF4020Z	SCREW	POWER TRANS	2		
10	SBSF3010Z	TAP.SCREW	AC SOCKET	2		
	SBSF3010Z	TAPPING SCREW	VOLTAGE SW	2	U	
11	SBSF3050Z	SCREW	FRONT+REAR	6		
12	SBSF3010Z	TAP.SCREW	FOR MECHA	2		
13	FMYN7003-012T	NAME PLATE		1	VX	
	FMYN7003-015T	NAME PLATE		1	GI	
	FMYN7003-008T	NAME PLATE		1	G	
	FMYN7003-002T	NAME PLATE		1	B	
	FMYN7003-004T	NAME PLATE		1	C	
	FMYN7003-005T	NAME PLATE		1	E	
	FMYN7003-006T	NAME PLATE		1	J	
	FMYN7003-007T	NAME PLATE		1	U	
14	VND5008-001	FCC LABEL(4)		1	J	
15	E70891-001	CLASS 1 LABEL		1	B,E,G,GI,VX	
	VND5001-007	HHS LABEL		1	J	
	VND4205-004	CAUTION LABEL		1	B	
	VND4320-001	CAUTION LABEL		1	VX	
16	FMJC1002-001UL	FRONT CABINET		1	J,C	
	FMJC1002-002	FRONT CABINET		1	B,E,G,GI,VX	
	FMJC1002-003	FRONT CABINET		1	U	
17	VJD5429-001	JVC MARK		1		
18	FMJK4002-001	LCD LENS		1		
19	FMJK3001-002	DIAL LENS		1	B,E,G	
	FMJK3001-003	DIAL LENS		1	GI	
	FMJK3001-004	DIAL LENS		1	U	
	FMJK3001-005	DIAL LENS		1	VX	
	FMJK3001-001	DIAL LENS		1	C,J	
20	FMJD4001-001	CONTROL PLATE		1		
21	FMXP3003-001	CD BUTTON(A)	SEARCH	1		
22	SBSF2608Z	TAP.SCREW	BUTTON(A)	1		
23	FMXP3004-001	CD BUTTON(B)	PLAY/PAUSE	1		
24	SBSF2608Z	TAP.SCREW	BUTTON(B)	1		
25	FMXP4003-001	CD EJECT BUTTON		1		
26	SBSF2608Z	TAP.SCREW	EJECT(B)	1		
27	VXL4421-001	VOLUME KNOB		1		
28	VXL4422-001	KNOB	BASS/TREBLE	1		
29	FMJT2001-001	CASSETTE DOOR		1		
30	VKY4180-001	CASSETTE SPRING		2		
31	FMJK4003-001	CASSETTE LENS		1		
32	VYH5601-001	GEAR		1		
33	FMKW4002-001	DOOR SPRING		1		
34	SSSF3010M	T SCREW	FRONT SIDE	2		
36	15100212T	SPRING PLATE	C.MECHA.	1		
37	FMXP3006-001	MECHA BUTTON	REC	1		
38	FMXP3006-002	MECHA BUTTON	PLAY	1		
39	FMXP3006-003	MECHA BUTTON	REW	1		
40	FMXP3006-004	MECHA BUTTON	FF	1		
41	FMXP3006-005	MECHA BUTTON	STOP/EJECT	1		
42	FMXP3006-006	MECHA BUTTON	PAUSE	1		
44	FMKL4001-001	BRACKET	CASSETTE MECHA	1		
45	SDST2605Z	SCREW	REC.LEVER	1		
46	SDSR2004Z	SCREW		2		
47	FMYH2001-001	TUNER CHASSIS		1		

BLOCK NO. 12MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
48	SBSF3010Z	TAP.SCREW		3		
49	LPSP2606Z	SCREW		1		
50	GBSF3010Z	TAP.SCREW	GEAR+T.CHASSIS	1		
51	FMKS3001-001	DIAL DRUM		1		
52	FMXL4003-001	TUNING KNOB		1		
53	FMJN4001-001	NEEDLE		1		
54	VXP5202-002	PUSH BUTTON		1		
55	FMYH4001-001	REMOTE ARM		1		
56	FMXQ4001-001	LEVER KNOB		2		
57	FMMH3001-001	HEAT SINK		1		
58	SBSF3010Z	TAP.SCREW	FOR IC	1		
59	SBSF3010Z	TAP.SCREW	FOR TRANSISTOR	2		
60	FMJD1001-001UL	CD CASE		1	J,C	
	FMJD1001-002	CD CASE		1	B,E,G,GI,VX	
61	FMKS4001-001	LOCK ARM		1		
62	VYH4769-002	GEAR		1		
64	VJD5410-204	PICK COVER		1		
65	FMYH4003-001	INSULATOR		2		
66	FMYH4003-002	INSULATOR		2		
67	FMYH3002-001	CD MECHA HOLDER		1		
68	SBSF3010Z	TAP.SCREW	CD M.HOLDER	4		
69	SDSF2006M	SCREW	PICK COVER	4		
70	SBSF3010Z	TAP.SCREW	CD AMP PCB	2		
71	SBSF3010Z	TAP.SCREW	CD CASE	2		
72	E65923-004	T.SCREW	CD OP/CL PCB	1		
73	Q03095-206	WASHER		1		
74	VKZ4001-110	WIRE HOLDER		1		
75	FMJT1001-001	CD DOOR		1		
76	FMJK4001-001	CD LENS		1		
77	VKS3547-001	CLAMPER		1		
78	E74897-002	C.D. MAGNET		1		
79	VYH7314-001	YOKE		1		
80	VYH7315-203	PAD		1		
81	FMKW4001-001	CD DOOR SPRING		1		
83	SBSF3010Z	TAP.SCREW		2		
85	VMZ0125-001Z	FUSE CLIP	F996	2	C	
	VMZ0125-001Z	FUSE CLIP	F999	2	C,J,U	
	VMZ0125-001Z	FUSE CLIP	F998	2		
	VMZ0125-001Z	FUSE CLIP	F997	2	C,E,U	
86	VND4003-023	FUSE LABEL	F999	1	U	
87	VND4003-052	FUSE LABEL	F998	1	U	
88	VND4003-052	FUSE LABEL	F997	1	E,U	
90	FMXL4005-001	MIC VOL KNOB		1	U	
91	VKL6752-001	SNAP PLATE		1	U	
92	SBST3006Z	TAPPING SCREW	MIC PCB	1	U	
93	FMKL4003-001	MIC HOLDER		1	U	
94	FMXL4004-001	FINE T.KNOB		1	U	
95	FMYH4002-001	FINE T.HOLDER		1	U	
96	SBSF2608Z	TAPPING SCREW	MIC HOLDER	1	U	
97	SBSF3010Z	TAPPING SCREW	F.TUN HOLDER	1	U	
98	E406709-001	CAUTION LABEL	CD CASE BACK	1	B,E,G,GI,VX	
F 996	QMF51N2-3R0J1	FUSE		1	C	
F 997	QMF51E2-3R15J1	FUSE		1	E,U	
	QMF51N2-3R0J1	FUSE		1	C	
F 998	QMF51N2-3R0J1	FUSE	J,C ONLY	1	J,C	
	QMF51E2-3R1	FUSE		1	B	
	QMF51E2-3R15J1	FUSE		1	E,G,GI,VX,U	
F 999	QMF51N2-R40J1	FUSE	J,C ONLY	1	J,C	
	QMF51N2-R50J1	FUSE		1	U	
SP 01	FMKW4003-001	SPRING	BATTERY	2		
SP 02	FMKW4003-001	SPRING	BATTERY	2		
T 991	VTP57P2-12J	POWER TRANS	FOR J,C ONLY	1	J,C	
	FMT57P2-17A	POWER TRANS		1	U	
	VTP57P2-12I	POWER TRANS.		1	B,E,G,GI,VX	



● CD mechanism assembly parts list

BLOCK NO. M3MMMMMM

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	EPB-002A	MECHA BASE ASSY		1		
	2	OPTIMA-6S	OPTICAL PICK-UP		1		
	3	E406777-001	GUIDE SHAFT		1		
	4	E307746-001	CD RACK		1		
	5	SDSF2006Z	SCREW		1		
	6	EPB-003A	MECHA GEAR		1		
	7	E75807-301	TURN TABLE		1		
	9	SDSP2003N	SCREW		1		
	10	E406783-001	DC MOTOR		1		
	11	E406784-001SA	DC MOTOR ASSY		1		
	12	E75832-001	SPECIAL SCREW		1		
	13	EMW10190-001	PRINTED BOARD		1		
	14	EMV5109-006B	CONN. TERMINAL		1		
	15	ESB1100-005	LEAF SWITCH		1		
	16	E407212-001	DAMPER		1		

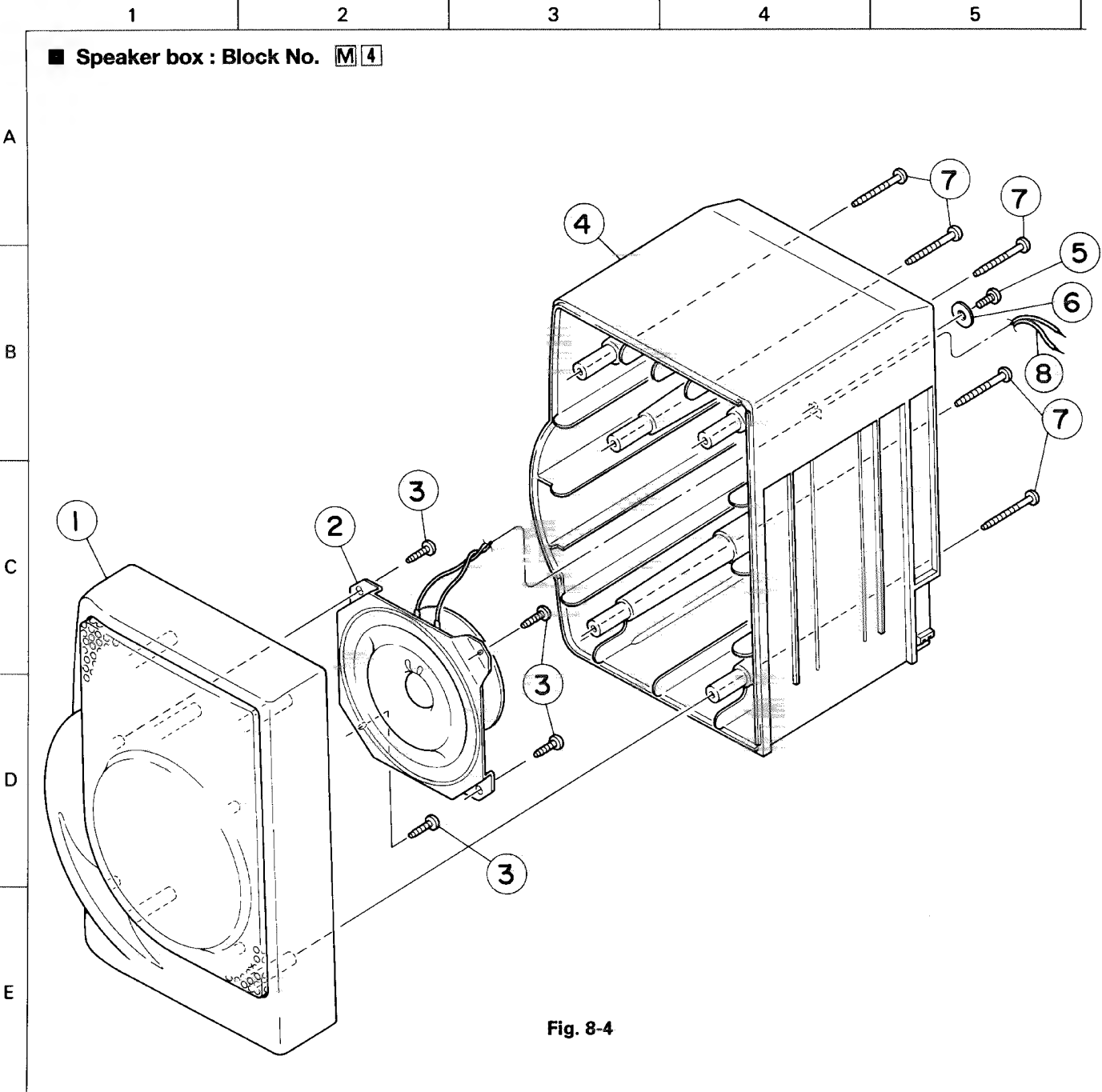


Fig. 8-4

● Speaker box parts list

BLOCK NO. M4MM							
A	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	1	FMJC2002-00A	SP F PANEL ASY	LEFT	1		
		FMJC2001-00A	SP F PANEL ASY	RIGHT	1		
	2	FMGS1002-001	SPEAKER		1		
	3	SBSF3010Z	TAP.SCREW	SPEAKER + FRONT	4		
	4	FMJC1006-001	SP REAR CABI(L)		1		
		FMJC1004-001	SP REAR CABI(R)		1		
	5	SBSF3008M	SCREW	SPEAKER CORD	1		
	6	VYSS2R7-006	SPACER	FOR SPK CORD	1		
	7	SBSF3035Z	TAP.SCREW	FRONT + REAR	4		
	8	VMP0040-002T	SPEAKER CORD		1		

9. Main Adjustments

■ Test Instruments required for adjustment

1. Low frequency oscillator
(Frequency range: 50Hz to 20kHz)
(Output : 0 dBs across 600 Ω terminating resistor)
2. Attenuator(Impedance : 600 Ω)
3. Test Tapes
VTT712 For tape speed,wow and
flutter measurement
VTT724 For playback output level measurement
VTT736 For playback frequency response check
response check
VTT703 For head azimuth adjustment
4. Blank tapes
Normal : UR or AC224
5. Electronic voltmeter,
6. Distortion meter
7. Frequency counter
8. Wow and flutter meter
9. Torque gauge : CTG — K
(Cassette type) For mechanism adjustment

■ Measuring conditions (Amplifier section)

Supply voltage AC120V (60Hz):C/J version
AC230V(50/60Hz):B/E/G/GI/VX
AC110~127/220~240V(50/60Hz):U Version

Reference output level :Speaker
0 dBs (0.775V) / 3 Ω
: Headphone
0 dBs (0.775V)/ 32 Ω

Reference input level
: — 21dBs supplied to test point

Standard test frequency..... 1kHz

Output measuring point Speaker terminal
Dummy load 3 Ω
or headphone(32 Ω)

● Standard position of switches

Function switch TAPE

● Standard position of controls

Tone..... Maximum position
Main volume adjust 0 dBs output position
Beat cut switch Standard 1

● Test remarks

1. Negative side of the input and output terminals of the testing set, shall be isolated from each other. The negative side should not be commonly connected when a 2channel electronic voltmeter is connected.
2. A dummy load shall be connected to the output terminal and the lead wires of dummy load shall be as thick as possible.

■ Measuring condition (Tuner section)

Power supply voltage to tuner..... DC 7V
Reference output Speaker : 50mW(0.39 V / 3 Ω)
Headphon : 0.08V/ 32 Ω
AM modulation 400Hz, 30%
FM modulation 400Hz deviation 22.5kHz

● Standard position of switches and controllers

Function..... RADIO
Mode STEREO
Tone Maximum position

● Remarks for alignment

1. Connect 30 pF capacitor and 33 k Ω resistor to the output terminal of the IF sweeper in series while 0.082 μ F capacitor and 100k Ω resistor to the input terminal in series.
2. Set the output level of the IF sweeper as low as adjustable.
3. IF alignment is not necessary for both AM and FM MPX alignment is not necessary either. All IFTs and MPX coil are non-adjusting type.

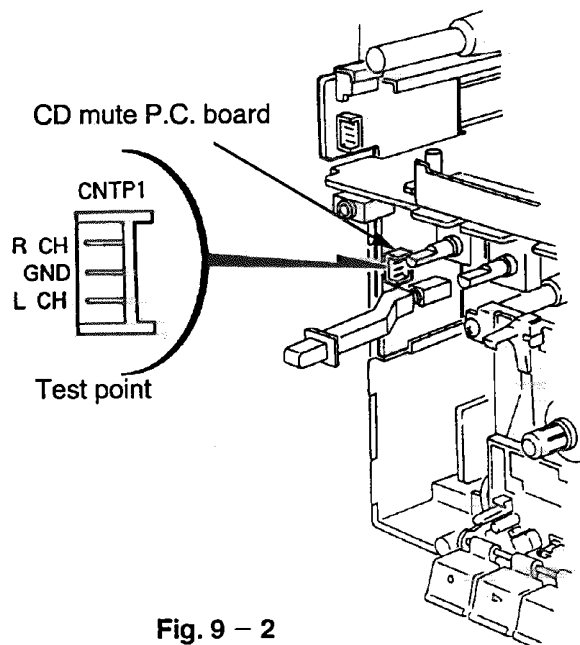


Fig. 9 - 2

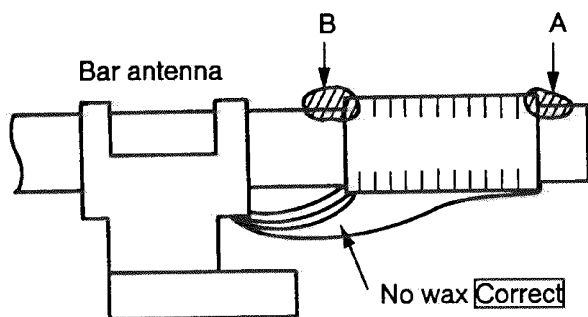


Fig. 9 - 3

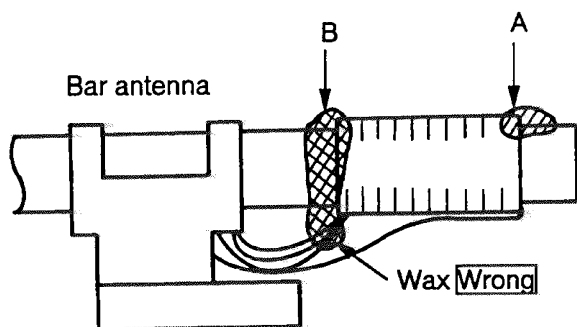


Fig. 9 - 4

● Test condition

- ① Test tape for REC/PB
Normal tape : AC - 224
- ② Standard test frequency
1kHz : unless otherwise specified
- ③ Reference input level: CNTP1 (- 21dBs)
- ④ Input for REC/PB, using to the check and measuring
Test point CNTP1: - 41dBs
- ⑤ Output for measuring, unless otherwise specified
At speaker terminal : J802(Dummy load 3 Ω)
- ⑥ position of test : Vertical

● Arrangement of Adjusting position

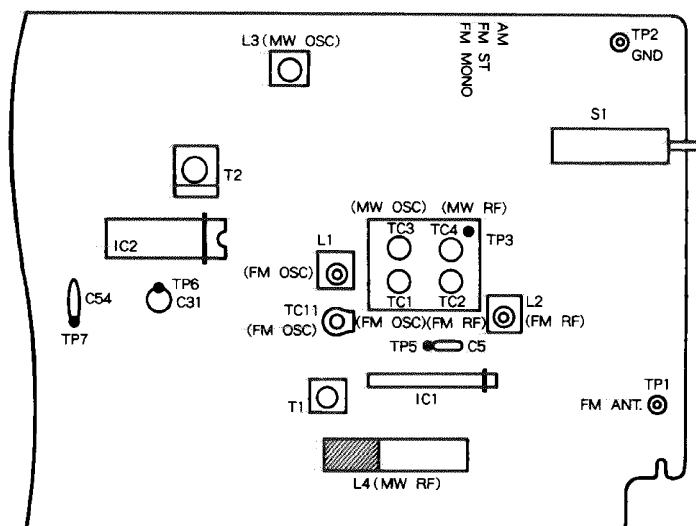
Caution for putting wax on the bar antenna

MW RF

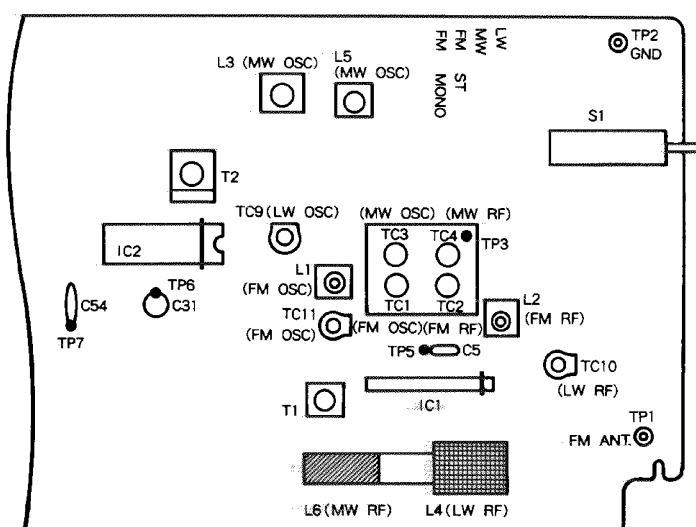
Following points must be care when putting wax on the bar antenna after MW RF alignment.

- ① In case fixing the bar antenna is certain.
- ② Waxing only "A" part is necessary. In case fixing the bar antenna is unstable. Wax "A" part first, and carry on other works then wax "B" part at last. To prevent tracking error, waxing B part should be done after Fig.9 - 3 cooling down "A" part sufficiently.
- ③ Be careful not to leak wax to the bottom of coil lead when Fig. 9 - 4 waxing B part.

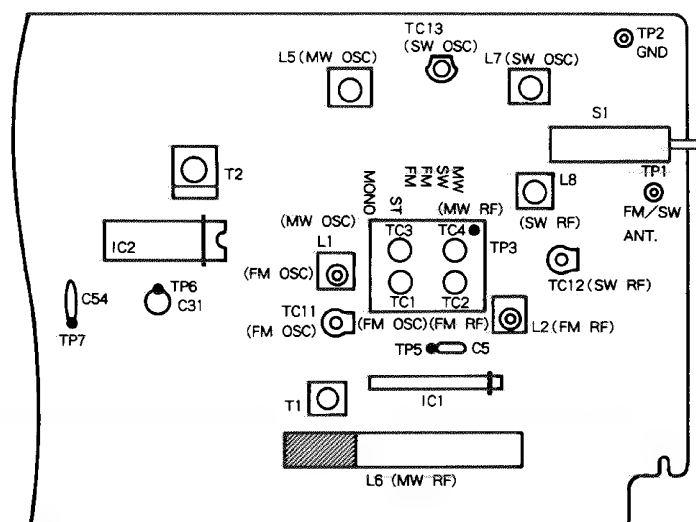
■ Arrangement of adjusting position

J / C VERSION

E / B / G / GI / VX VERSION



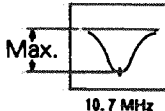
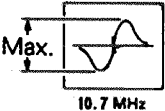
U VERSION



Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Head azimuth adjustment	Test tape : VTT703L (10kHz) Measuring point : Headphone (Dummy load 32 Ω)	① Play the test tape VTT703L(10kHz). ② Adjust the head azimuth screw so that the phase difference of the R channel becomes minimum at the maximum output point. After adjustment, lock more than half the circumference of the head azimuth screw. * Adjust the head azimuth screw only when the head is replaced.	Output : Maximum Phase difference : minimum	Head azimuth screw
Tape speed and Wow & flutter check	Test tape : VTT712(3kHz) Measuring point : Headphone (Dummy load 32 Ω)	① Play test tape VTT712 (3kHz) until it has been wound. ② The frequency counter reading should be within 2940~3090Hz. Otherwise, adjust the semi – fixed volume inside the motor housing. ③ The wow & flutter should be less than 0.4%(UNWTD).	2940~3090Hz Less than 0.4%(UNWTD)	Tape speed : Semi – fixed resistor inside the motor housing
Playback output check	Test tape : VTT724 Measuring point : Speaker (Dummy load 3 Ω)	When the test tape VTT724 is played, the L and R output deviation should be 4dB or less.	Deviation L,R : less than 4dB	–
Playback Frequency response check	Test tape : VTT736 Standard freq. : 1kHz Measuring point : Speaker (Dummy load 3 Ω)	When the test tape VTT736 is played, the playback frequency response should be 125Hz against 1kHz 5dB \pm 4 dB, 8kHz against 1kHz 0dB \pm 3dB.	125Hz/1kHz : 5dB \pm 4dB 8kHz/1kHz : 0dB \pm 3dB.	
Recording and Playback sensitivity check	Reference input : CNTP1 Measuring point : * Speaker (Dummy load 3 Ω)	Supply 1kHz (– 21dB) signal to the test point CNTP1 and record it. Play it back while checking that the level is within 0dB \pm 3dB .	within 0dB \pm 3dB .	–

■ **Tuner Section (*AM,FM IF Adjust : No alignment is necessary, in using the solid IF.)**

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
<p>Adjustment of FM IF</p> <p>Do not adjust the FM IFT other than repair since it is of an adjustment free type.</p>	<ul style="list-style-type: none"> Band select : FM Receive freq. : Near the upper band edge where no signal comes in.. input position : TP5 (hot side) output position : TP6 (hot side) TP7 (earth side) 	<p>① Remove CF3 so that "S" curve may be changed to IF wave from as shown Fig.a. Adjust T1 further more to obtain maximum and balanced wave from.</p> <p>② Put back CF3 so that "S" curve on the scope may obtain maximum and balanced wave from as shown Fig.b</p> <p>On the FM circuit, IF filter and discriminator is solid units, so there is unnecessary for tuning.</p> <p>In case IF tuning may be needed (Repair etc.....),do that above mentioned alignment.</p>	<p>Symmetrical waveform</p> <p>:Maximum output</p> <div style="text-align: center;">  <p>10.7 MHz</p>  <p>10.7 MHz</p> </div>	<p>T1</p> <p style="text-align: right;">Fig.a Fig.b</p>
<p>Adjustment of AM IF</p> <p>Do not adjust the AM IFT other than repair since it is of an adjustment free type.</p>	<ul style="list-style-type: none"> Band select : AM Receive freq. : Near the upper band edge where no signal comes in. input position : TP3(hot side) output position : TP6 (hot side) TP7 (earth side) 	<p>Adjust above mentioned aligning position, so that maximum and symmetrical wave form (see Fig.a) can be obtained, in this case, the wave peak should appear on the center marker (455kHz) in the scope of sweeper.</p> <p>On the AM IF circuit, IF filter is solid units, so there is unnecessary for IF tuning. IN case of tuning may be needed(repair etc...), do the above mentioned alignment.</p>	<p>Symmetrical waveform</p> <p>: maximum</p>	T2
<p>Adjustment of FM RF</p> <p>B/C/E/G/J version only</p>	<ul style="list-style-type: none"> Band selector : FM signal input : TP1 (hot side) TP2 (earth side)Through dummy antenna 	<p>① Adjust the L1 so as to tune in 87.5MHz signal at the maximum capacitance position.</p> <p>② Adjust the TC1, TC11 so as to tune in 109.0MHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① & ② .</p> <p>④ Adjust the L2 for the maximum sensitivity while receiving 90.0MHz signal.</p> <p>⑤ Adjust the TC2 for the maximum sensitivity while receiving 106.0MHz signal.</p> <p>⑥ Repeat the above step ④ & ⑤ .</p>	<p>Maximum output</p>	<p>L1</p> <p>TC1,TC11</p> <p>L2</p> <p>TC2</p>

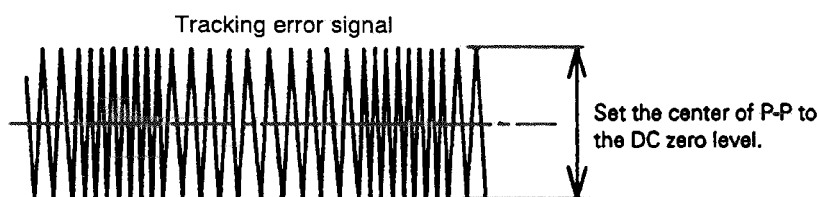
Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Adjustment of FM RF GI version only	<ul style="list-style-type: none"> Band selector : FM signal input : TP1 (hot side) TP2 (earth side)Through dummy antenna 	① Adjust the L1 so as to tune in 87.35MHz signal at the maximum capacitance position. ② Adjust the TC1, TC11 so as to tune in 108.3MHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L2 for the maximum sensitivity while receiving 90.0MHz signal. ⑤ Adjust the TC2 for the maximum sensitivity while receiving 106.0MHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L1 TC1, TC11 L2 TC2
Adjustment of FM RF VX Version only	<ul style="list-style-type: none"> Band selector : FM signal input : TP1 (hot side) TP2 (earth side)Through dummy antenna 	① Adjust the L1 so as to tune in 64.0MHz signal at the maximum capacitance position. ② Adjust the TC1, TC11 so as to tune in 109.0MHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L2 for the maximum sensitivity while receiving 69.0MHz signal. ⑤ Adjust the TC2 for the maximum sensitivity while receiving 102.0MHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L1 TC1, TC11 L2 TC2
Adjustment of FM RF U version only	<ul style="list-style-type: none"> Band selector : FM signal input : TP1 (hot side) TP2 (earth side)Through dummy antenna 	① Adjust the L1 so as to tune in 87.5MHz signal at the maximum capacitance position. ② Adjust the TC1, TC11 so as to tune in 108.3MHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L2 for the maximum sensitivity while receiving 90.0MHz signal. ⑤ Adjust the TC2 for the maximum sensitivity while receiving 106.0MHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L1 TC1,TC11 L2 TC2

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Adjustment of MW RF C/J version only	<ul style="list-style-type: none"> Band selector : MW signal input : Loop antenna 	① Adjust the L3 so as to tune in 520kHz signal at the maximum capacitance position. ② Adjust the TC3 so as to tune in 1750kHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L4 for the maximum sensitivity while receiving 600kHz signal. ⑤ Adjust the TC4 for the maximum sensitivity while receiving 1500kHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L3 TC3 L4 TC4
Adjustment of MWRF B/E/G/ VX / U Version only	<ul style="list-style-type: none"> Band selector : MW signal input : Loop antenna 	① Adjust the L5 so as to tune in 520kHz signal at the maximum capacitance position. ② Adjust the TC3 so as to tune in 1650kHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L6 for the maximum sensitivity while receiving 600kHz signal. ⑤ Adjust the TC4 for the maximum sensitivity while receiving 1400kHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L5 TC3 L6 TC4
Adjustment of MW RF GI version only	<ul style="list-style-type: none"> Band selector : MW signal input : Loop antenna 	① Adjust the L5 so as to tune in 516kHz signal at the maximum capacitance position. ② Adjust the TC3 so as to tune in 1632kHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L6 for the maximum sensitivity while receiving 600kHz signal. ⑤ Adjust the TC4 for the maximum sensitivity while receiving 1400kHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L5 TC3 L6 TC4

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Adjustment of LW RF B/E/G/VX version	<ul style="list-style-type: none"> • Band selector : LW • signal input : Loop antenna 	① Adjust the L3 so as to tune in 145kHz signal at the maximum capacitance position. ② Adjust the TC9 so as to tune in 290kHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L4 for the maximum sensitivity while receiving 145kHz signal. ⑤ Adjust the TC10 for the maximum sensitivity while receiving 290kHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L3 TC9 L4 TC10
Adjustment of LW RF GI Version only	<ul style="list-style-type: none"> • Band selector : LW • signal input : Loop antenna 	① Adjust the L3 so as to tune in 138kHz signal at the maximum capacitance position. ② Adjust the TC9 so as to tune in 293kHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L4 for the maximum sensitivity while receiving 138kHz signal. ⑤ Adjust the TC10 for the maximum sensitivity while receiving 293kHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L3 TC9 L4 TC10
Adjustment of SW RF U version only	<ul style="list-style-type: none"> • Band selector : SW • signal input : TP1(hot side) : TP2 (earth side) through dummy antenna 	① Adjust the L7 so as to tune in 5.8MHz signal at the maximum capacitance position. ② Adjust the TC13 so as to tune in 18.6MHz signal at the minimum capacitance position. ③ Repeat the above step ① & ②. ④ Adjust the L8 for the maximum sensitivity while receiving 6.0MHz signal. ⑤ Adjust the TC12 for the maximum sensitivity while receiving 18.0MHz signal. ⑥ Repeat the above step ④ & ⑤.	Maximum output	L7 TC13 L8 TC12

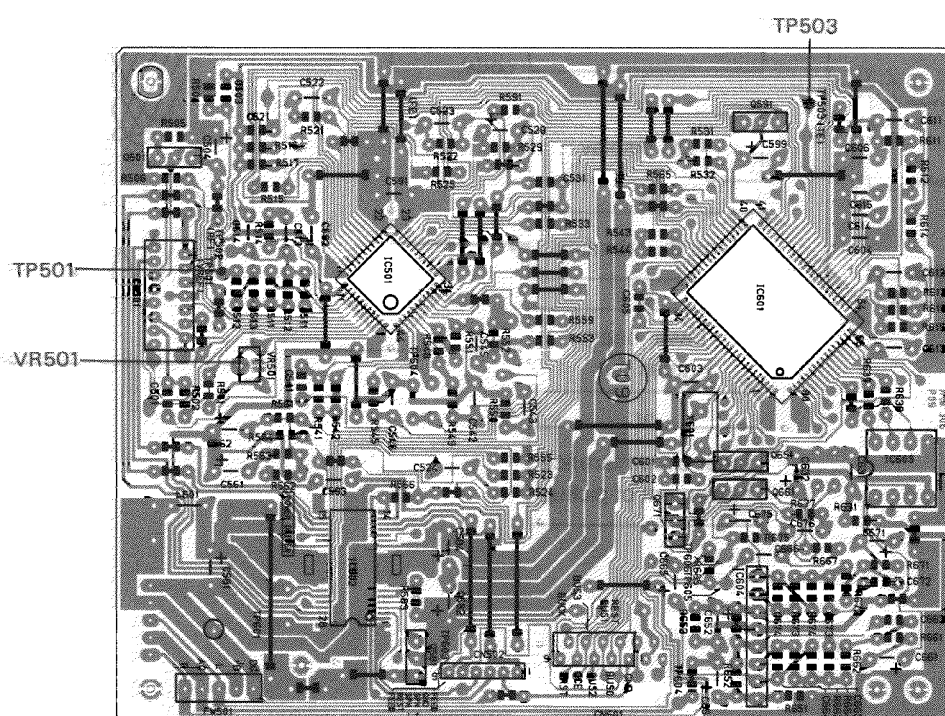
■ CD player Section

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Tracking offset adjustment	Test disc :CTS1000 Oscilloscope	<ol style="list-style-type: none"> ① Connect an oscilloscope across the test points TP503 (hot side) ,TP501 (Negative side). ② Play the test disc CTS1000. ③ Shortcircuit the TP504 to the TP501 while playing , then the tracking error signal will be emitted for about 3 seconds. ④ Adjust the VR501 so that the waveform of the tracking error signal on the oscilloscope becomes symetrical to the DC zero level. ⑤ Repeat the steps 2, 3, and 4 for the best result since the tracking error signal appears on the screen just for 3 sconds. 	Set the center of P – P to the DC zero level.	VR501



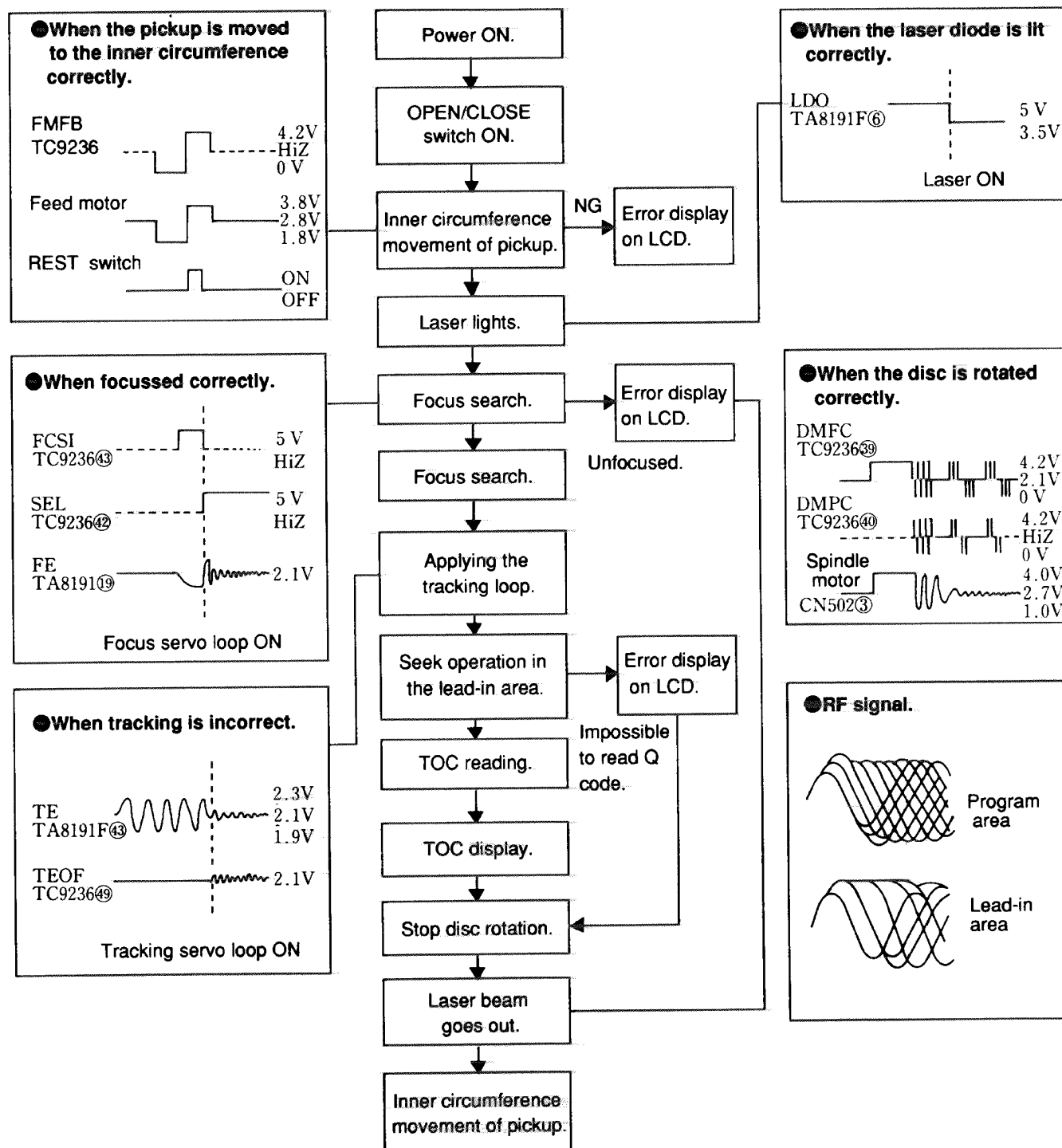
Note : The oscilloscope shall be connected by DC coupling.

■ Arrangement of adjusting positions: CD Amplifier P.C. board

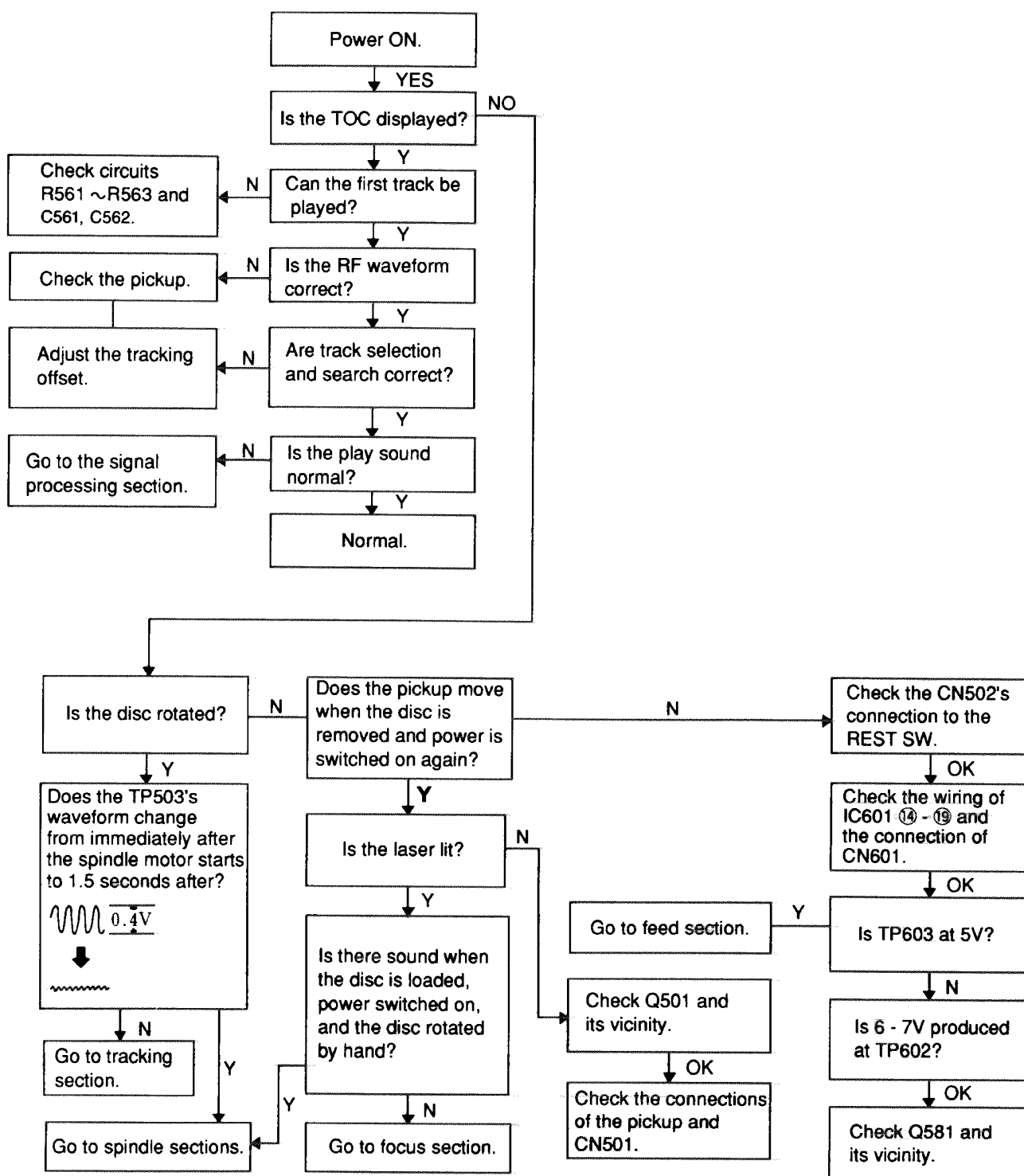


10. Troubleshooting

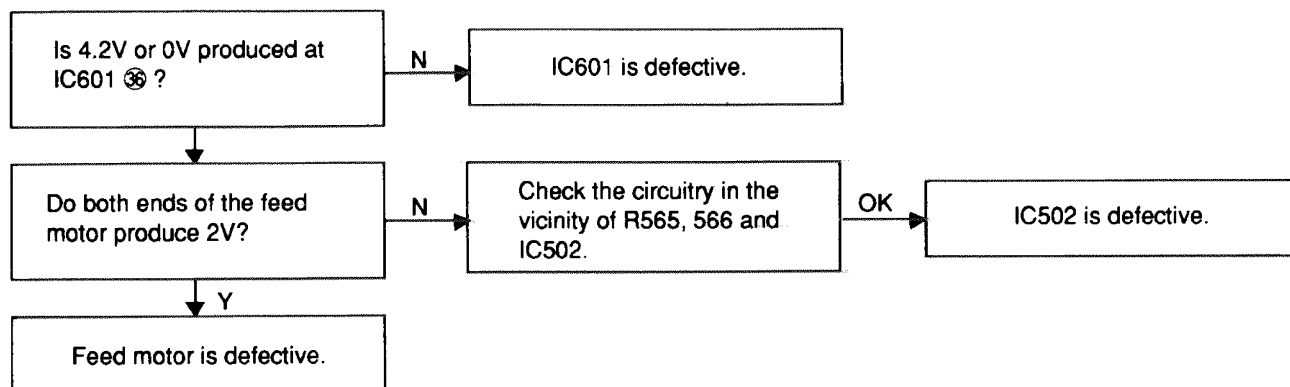
General descriptions of TOC (Table of Contents) readings



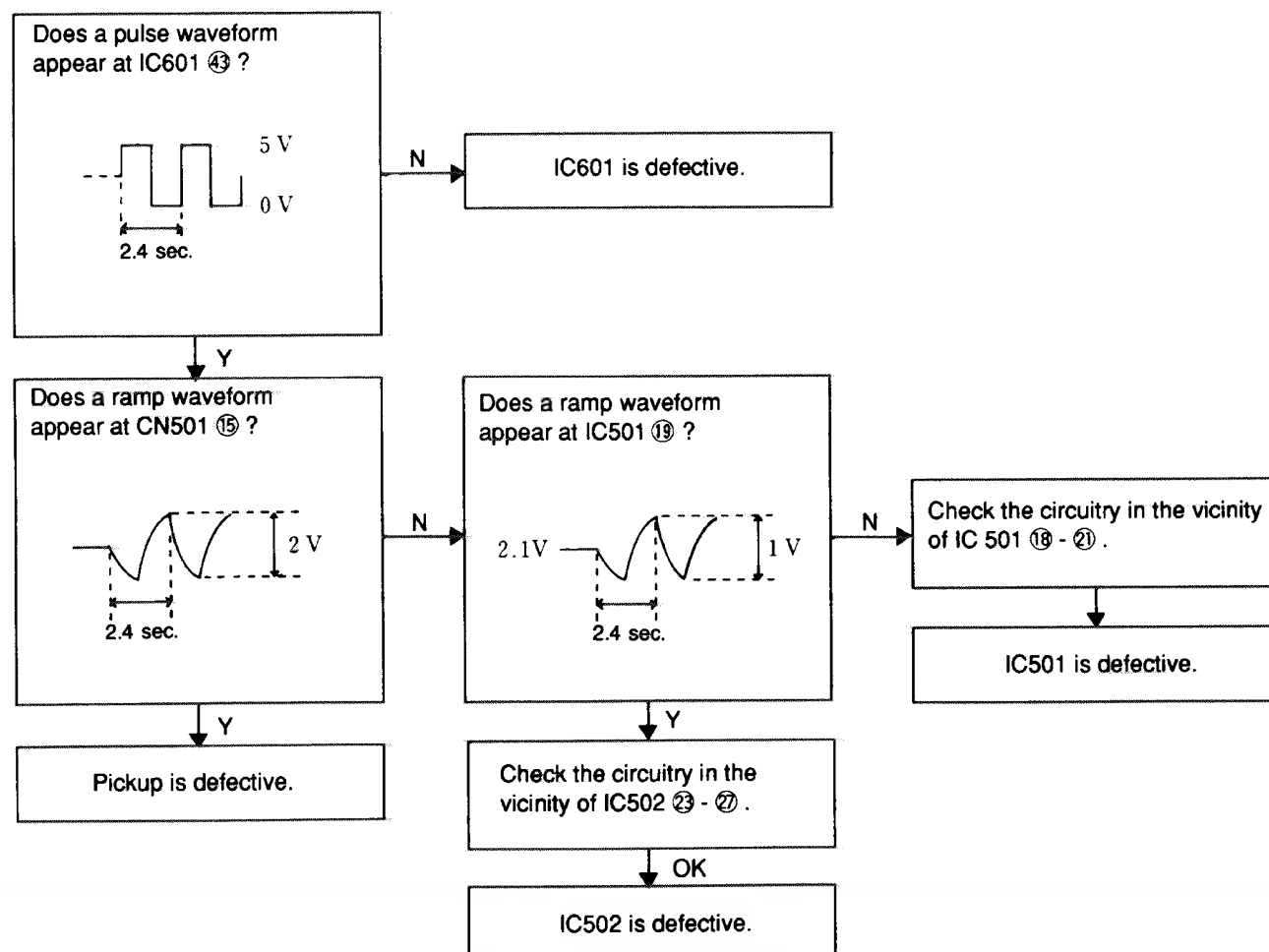
General section



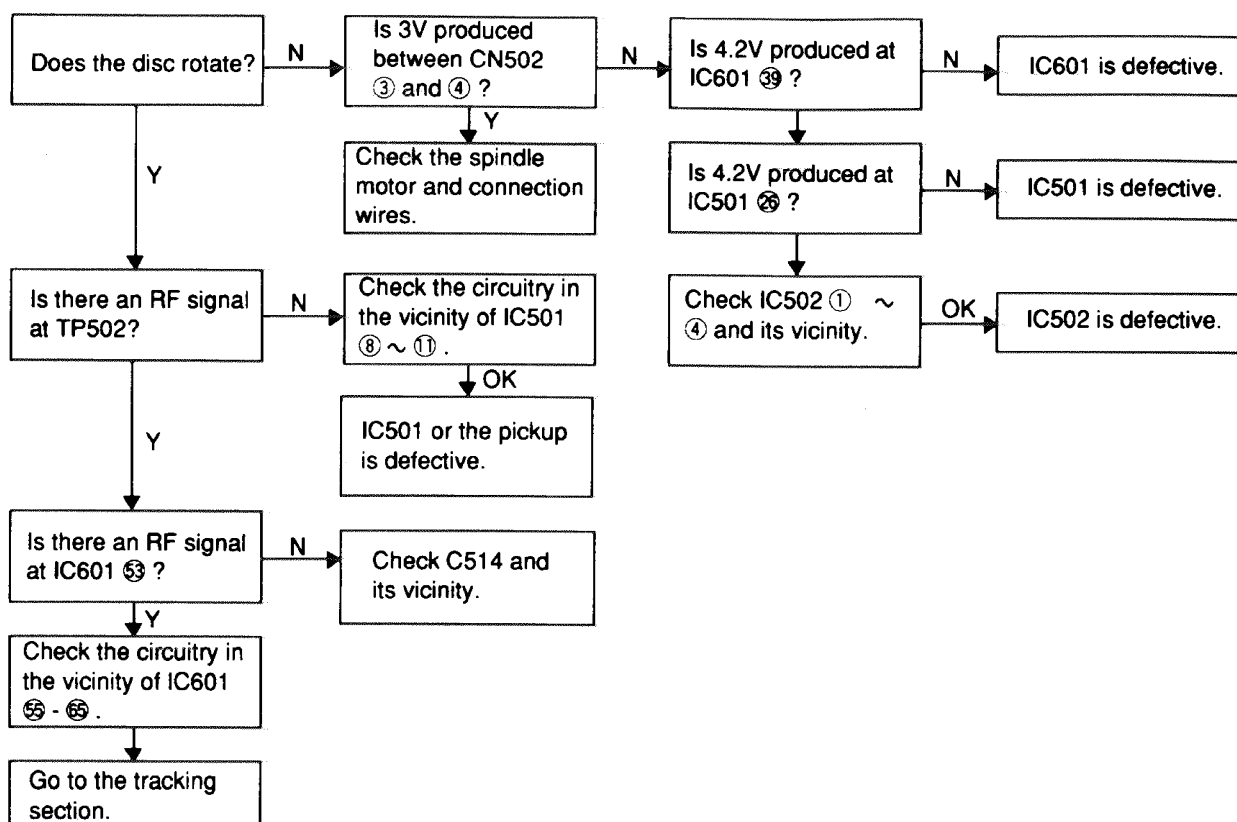
■ Feed section



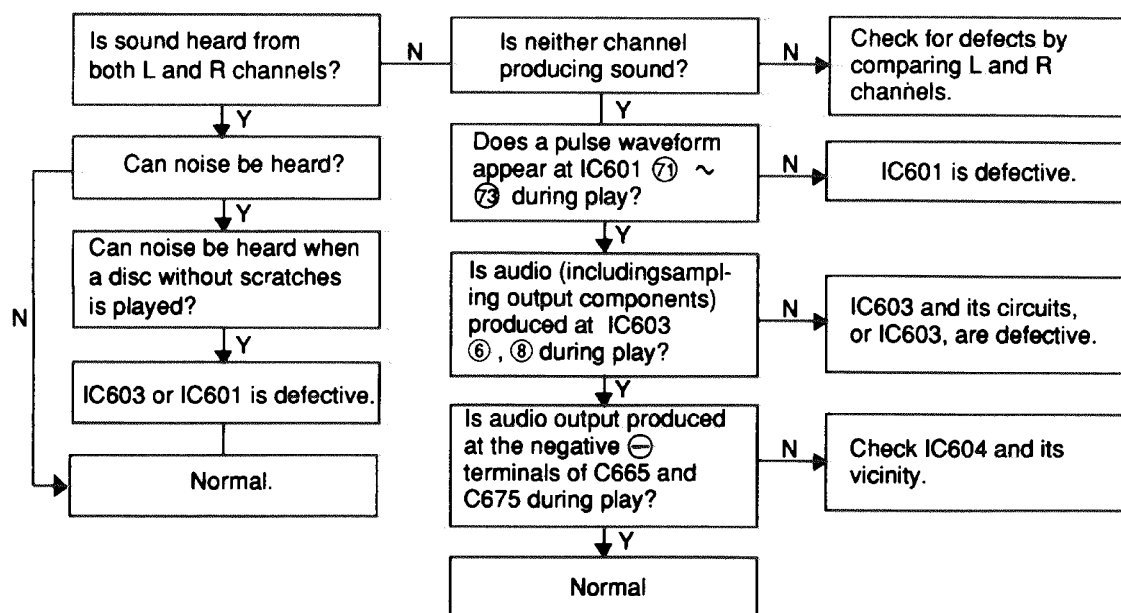
■ Focus section



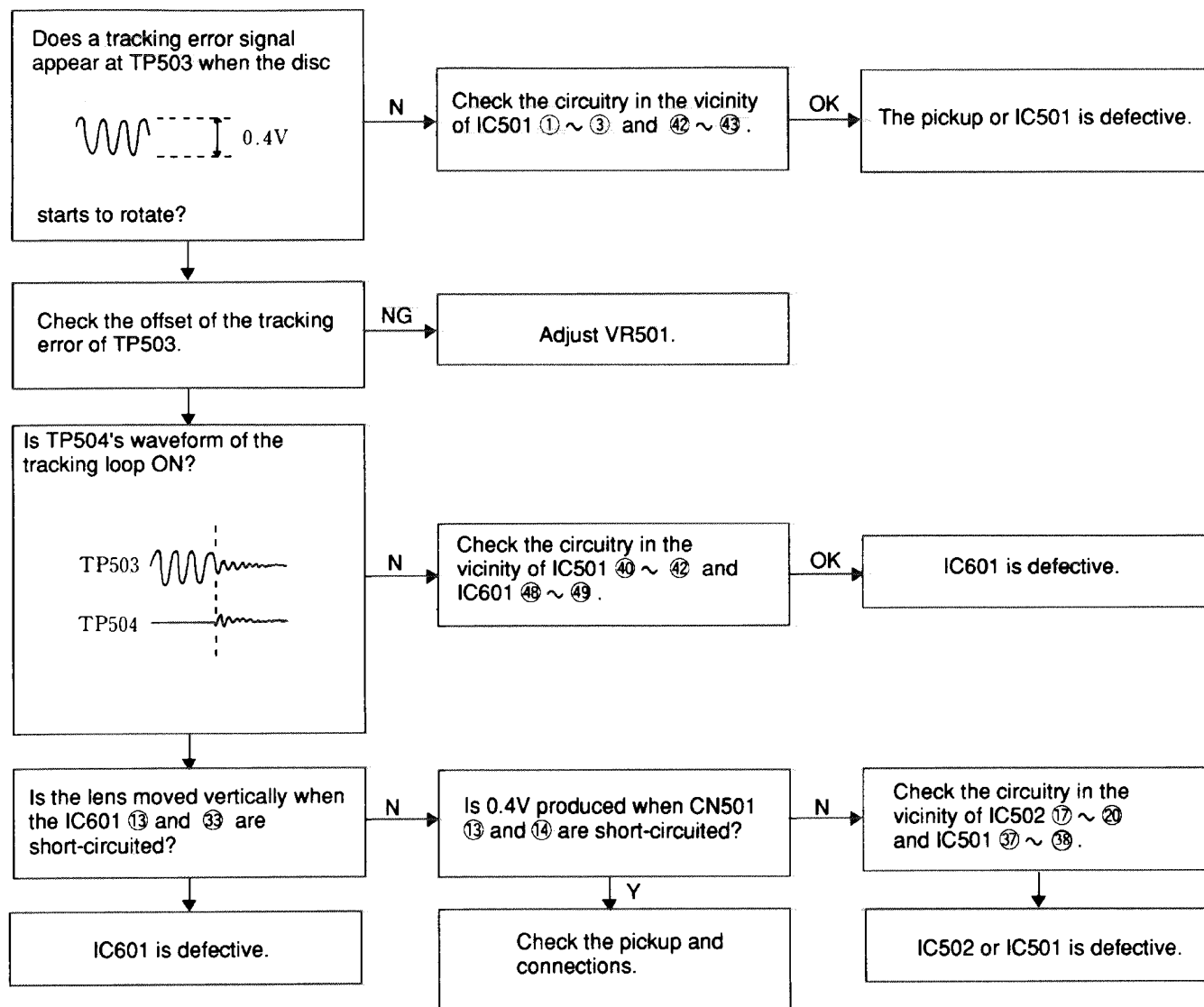
■ Spindle motor section



■ Signal processing section



■ Tracking section



11. Block Diagram

■ C/J version

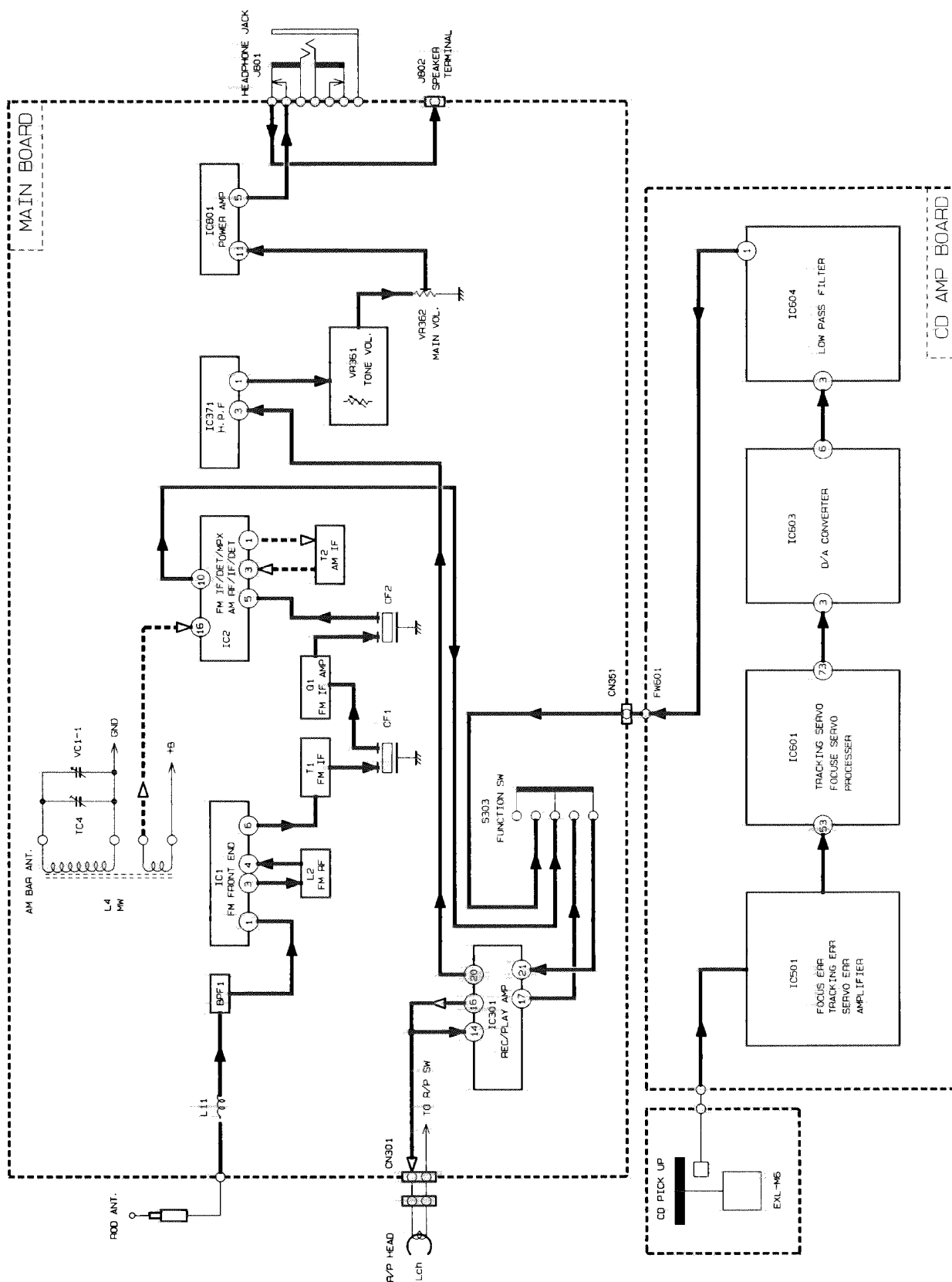


Fig. 11-1

■ B/E/G/GI/VX version

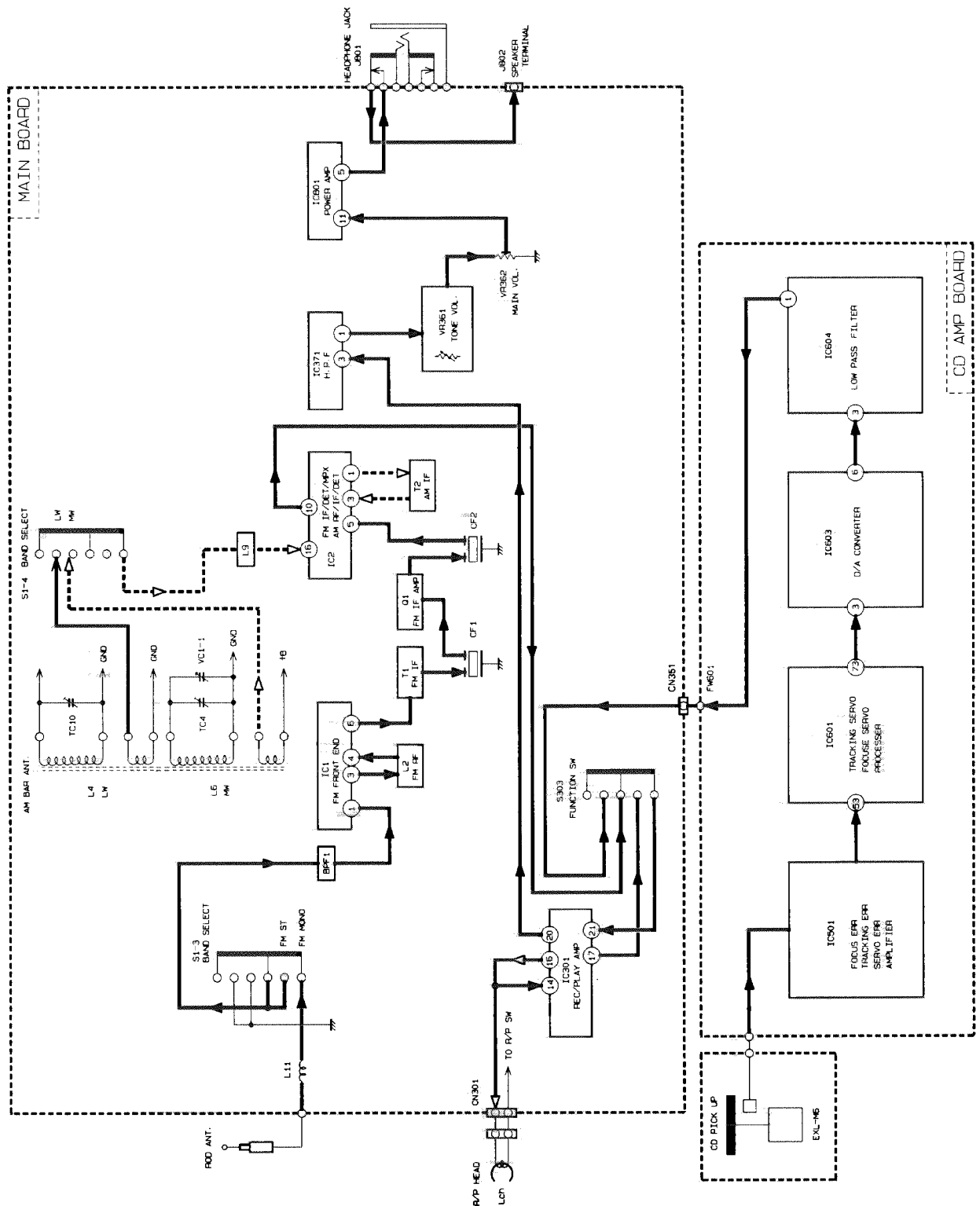


Fig. 11-2

■ U version

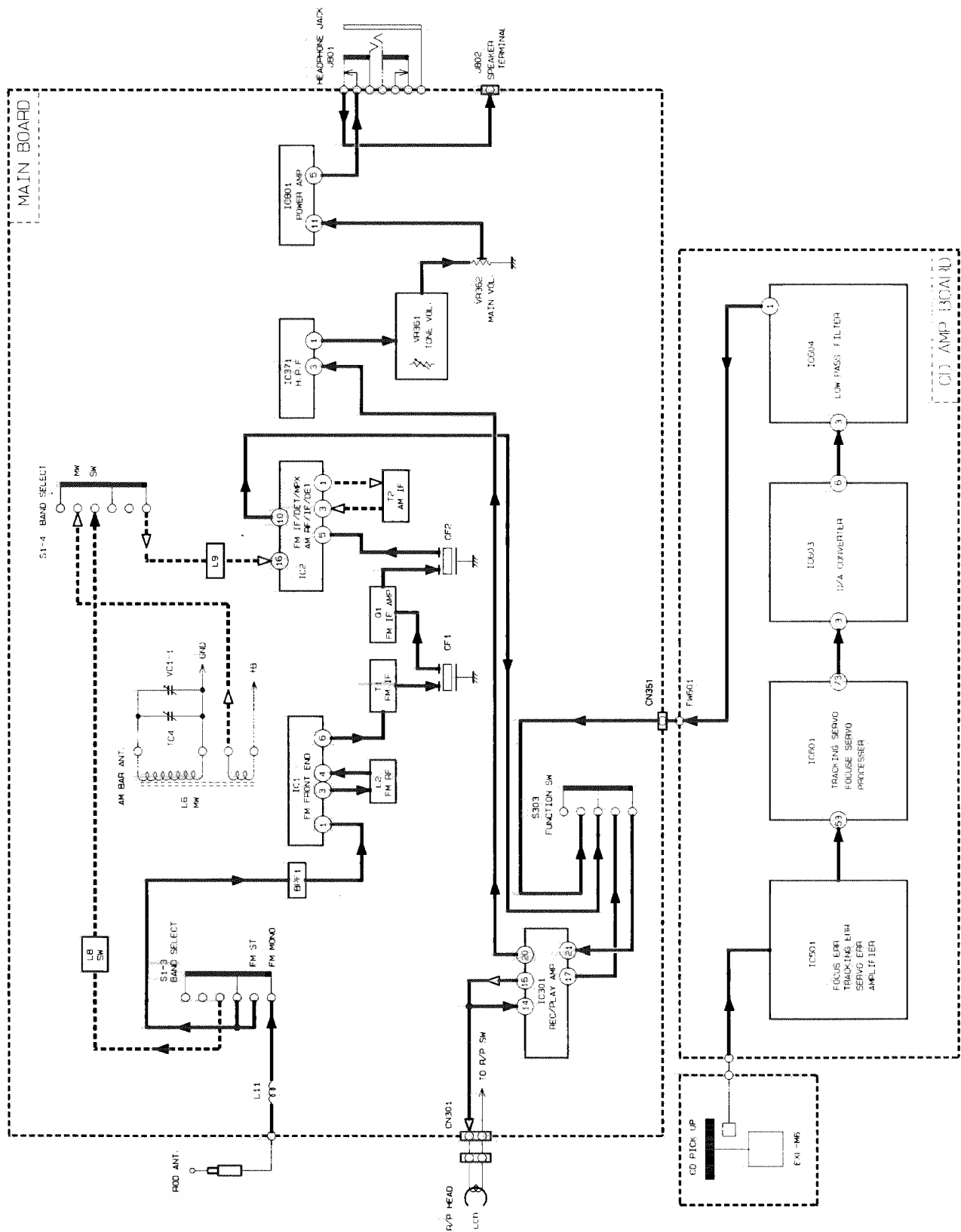
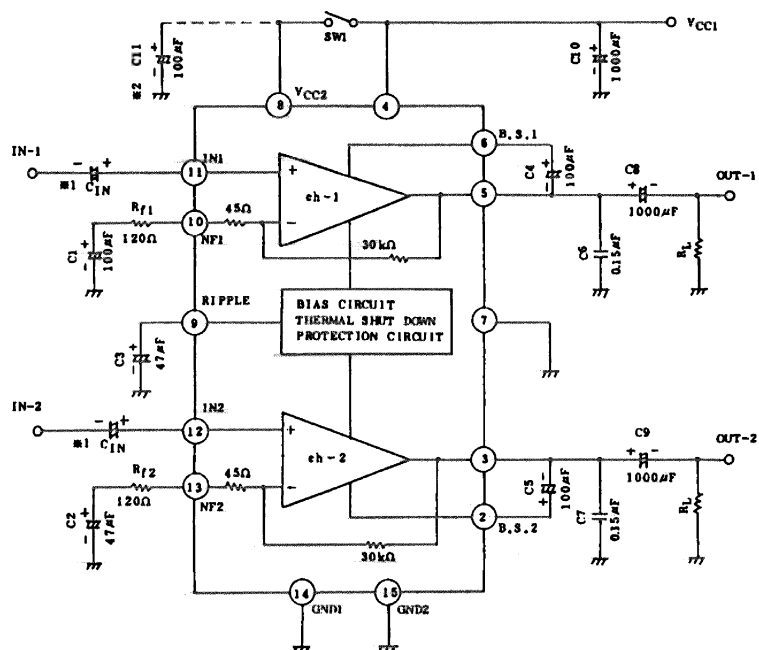


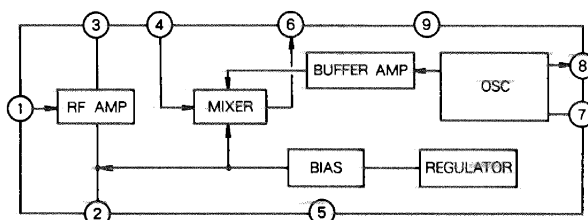
Fig. 11-3

■ Main IC Block Diagram

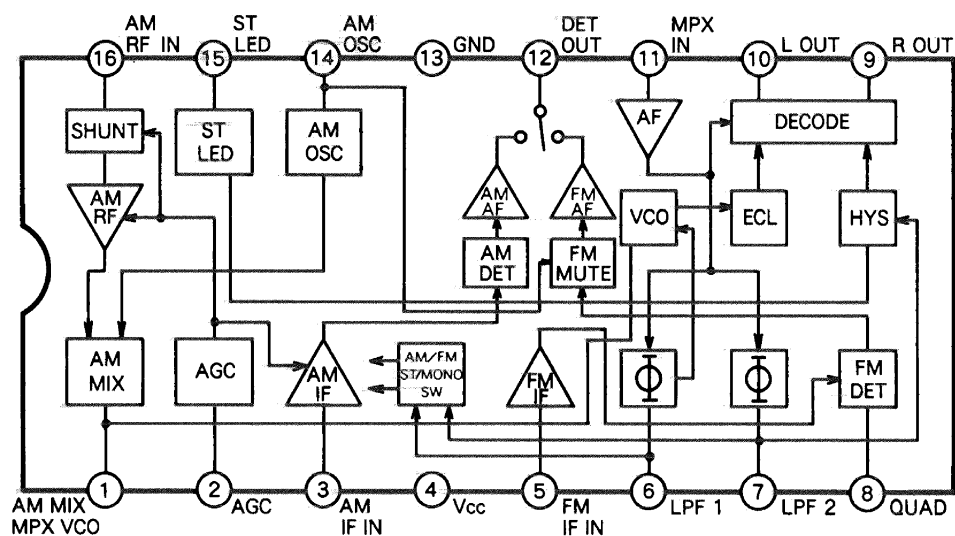
- Power Amplifier P.C. Board
 - IC304 (POWER AMPLIFIER)
 - : TA8229K



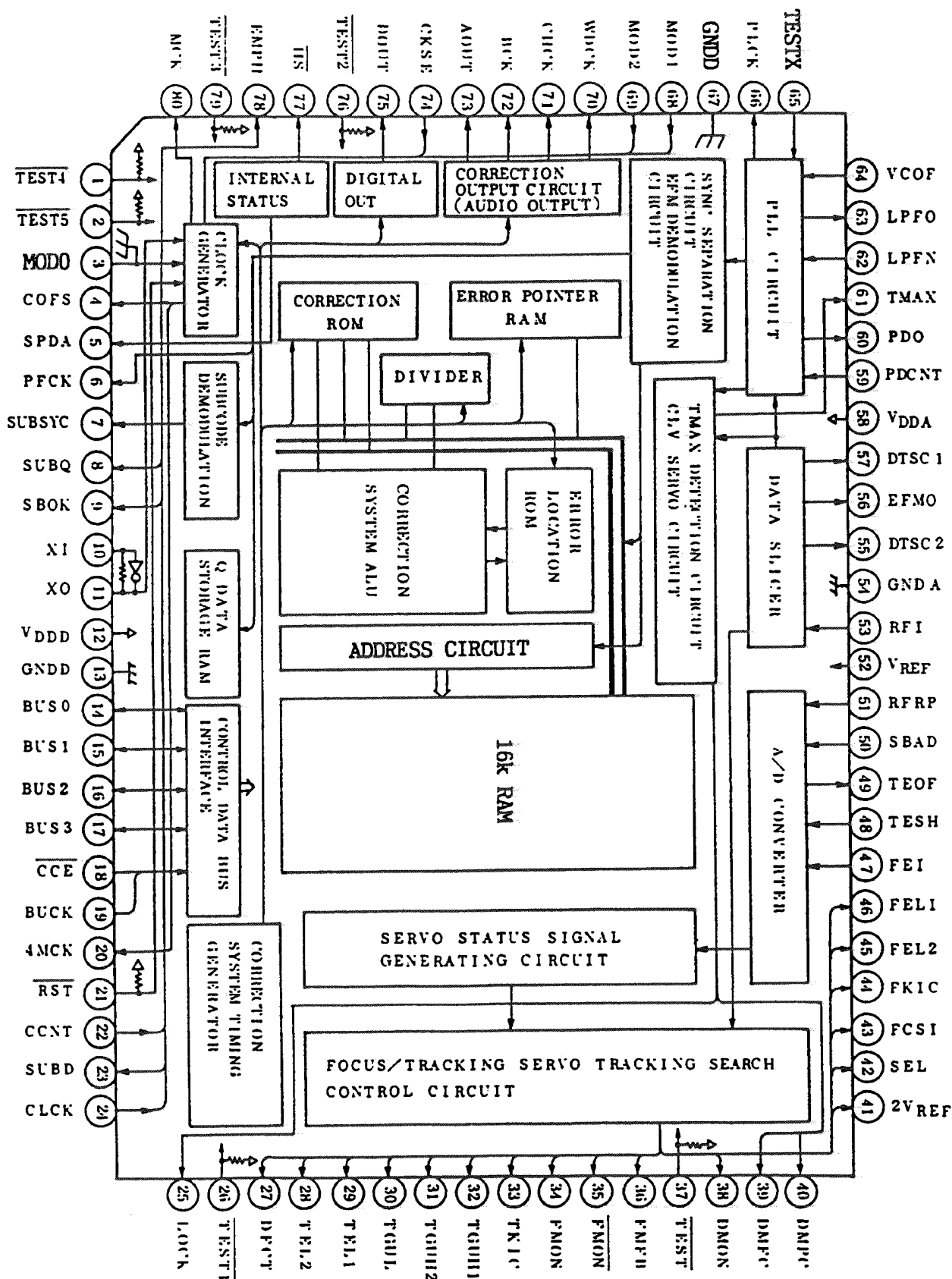
- IC1: TA7358P (N)



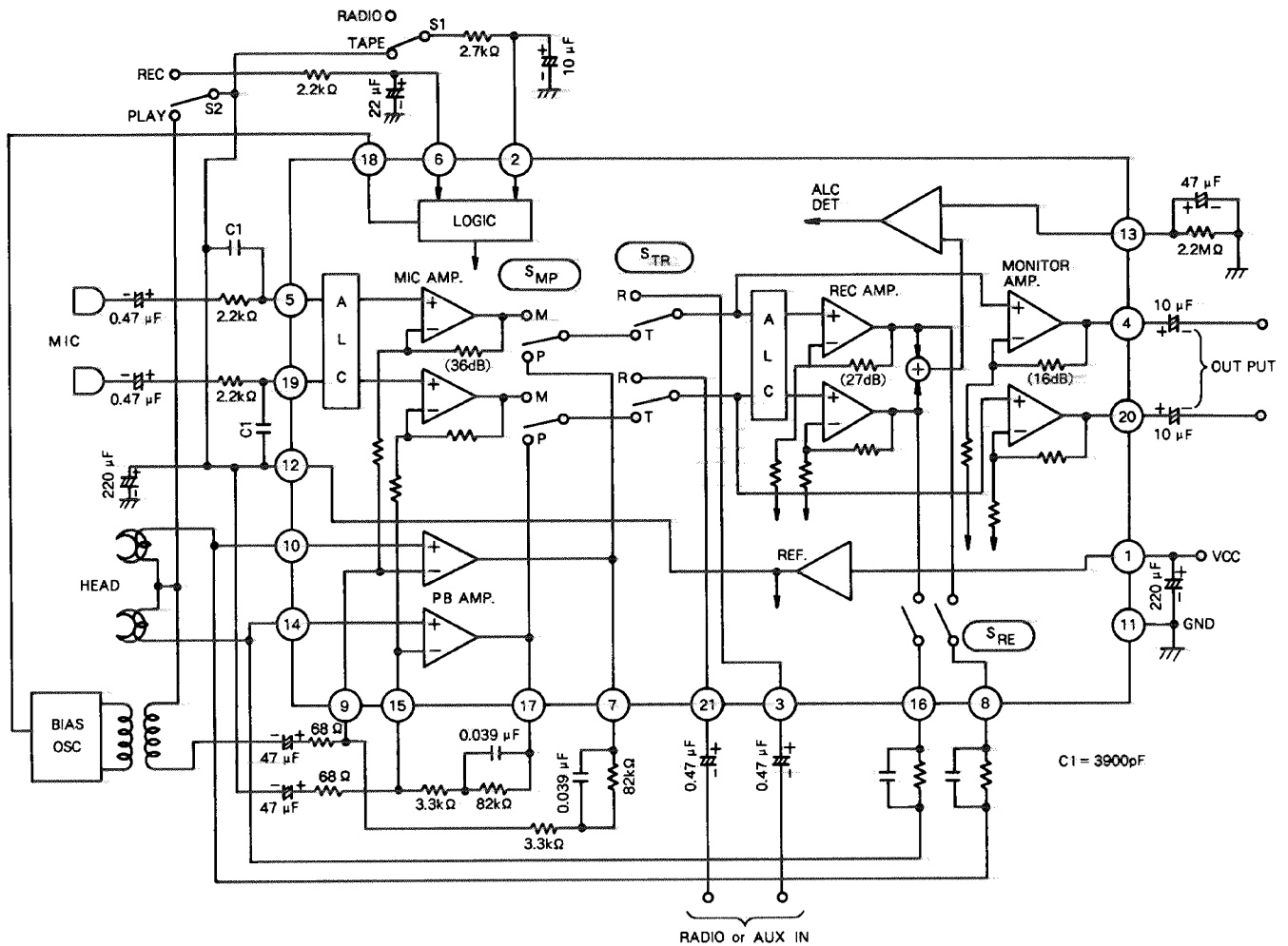
- IC2: TA8186P



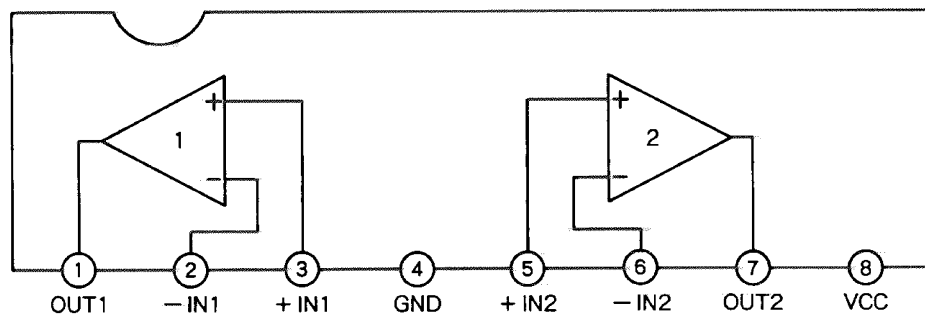
● IC601 : TC9236AF (CD 1 CHIP PROSESSER)



●IC301: TA7417AP

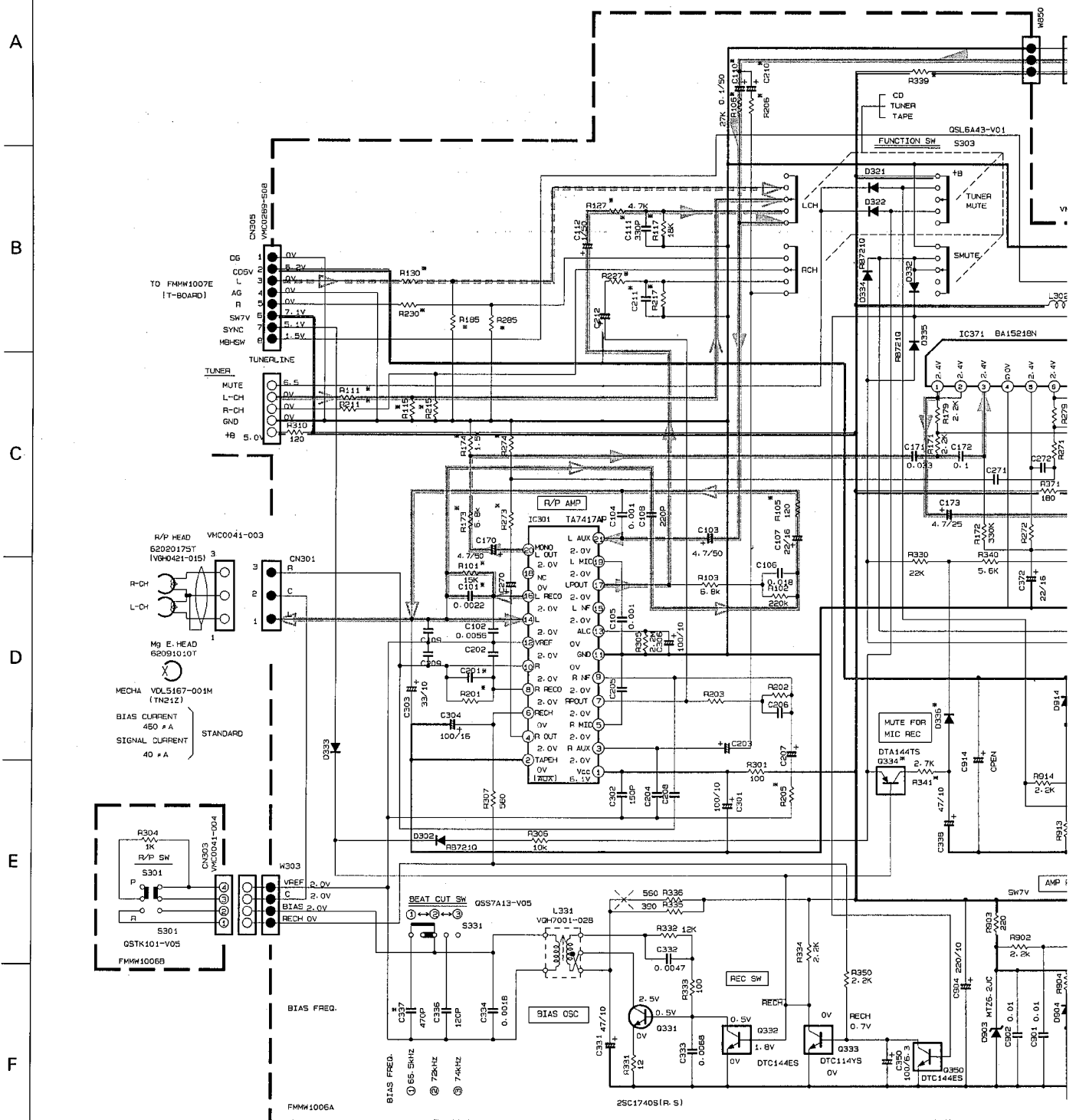


●IC371: BA15218N



12. Standard Schematic Diagram

■ Pre-amplifier & power amplifier circuit : Drawing No. FMDH7003-006AV (All version)



※ MARK REF. NO PARTS

LOCATION	F-13	E-4	F-12	F-10	H-9	H-5	H-9	H-9	B-7	B-7	D-11	E-3	D-3	F-8	G-F
	VR362	R115, R215	Q121, Q221	R340	Q334	C339	Q336	R341	C110, 210	R105, 205	L302	R111, 211	R130, R230	R101, R201	C101, R201
B	QVDB17A-V02 50K A	5.6K	DTC114TS	5.6K	-	47/10	B144	-	-	-	VQP002B-100Z	B135	5.6K	18K	0.0015
C	QVDB17A-V02 50K A	3.9K	DTC114TS	5.6K	-	47/10	B144	-	-	-	B134	QPD161J-682	5.6K	18K	0.0015
J	QVDB17A-V02 50K A	3.9K	DTC114TS	5.6K	-	47/10	B144	-	-	-	B134	QPD161J-682	5.6K	18K	0.0015
E	QVDB17A-V02 50K A	5.6K	DTC114TS	5.6K	-	47/10	B144	-	-	-	VQP002B-100Z	B135	5.6K	18K	0.0015
U	QVDB17B-V02 50K B	4.7K	2SC2001(L: K)	5.6K	DTA144TS	47/10	18S133	2.7K	○	○	B134	QPD161J-682	B130, B131	15K	0.0022
G/61/VX	QVDB17A-V02 50K A	5.6K	DTC114TS	5.6K	-	47/10	B144	-	-	-	VQP002B-100Z	B135	5.6K	18K	0.0015

6

7

8

9

10

Mic jack circuit (U version only)

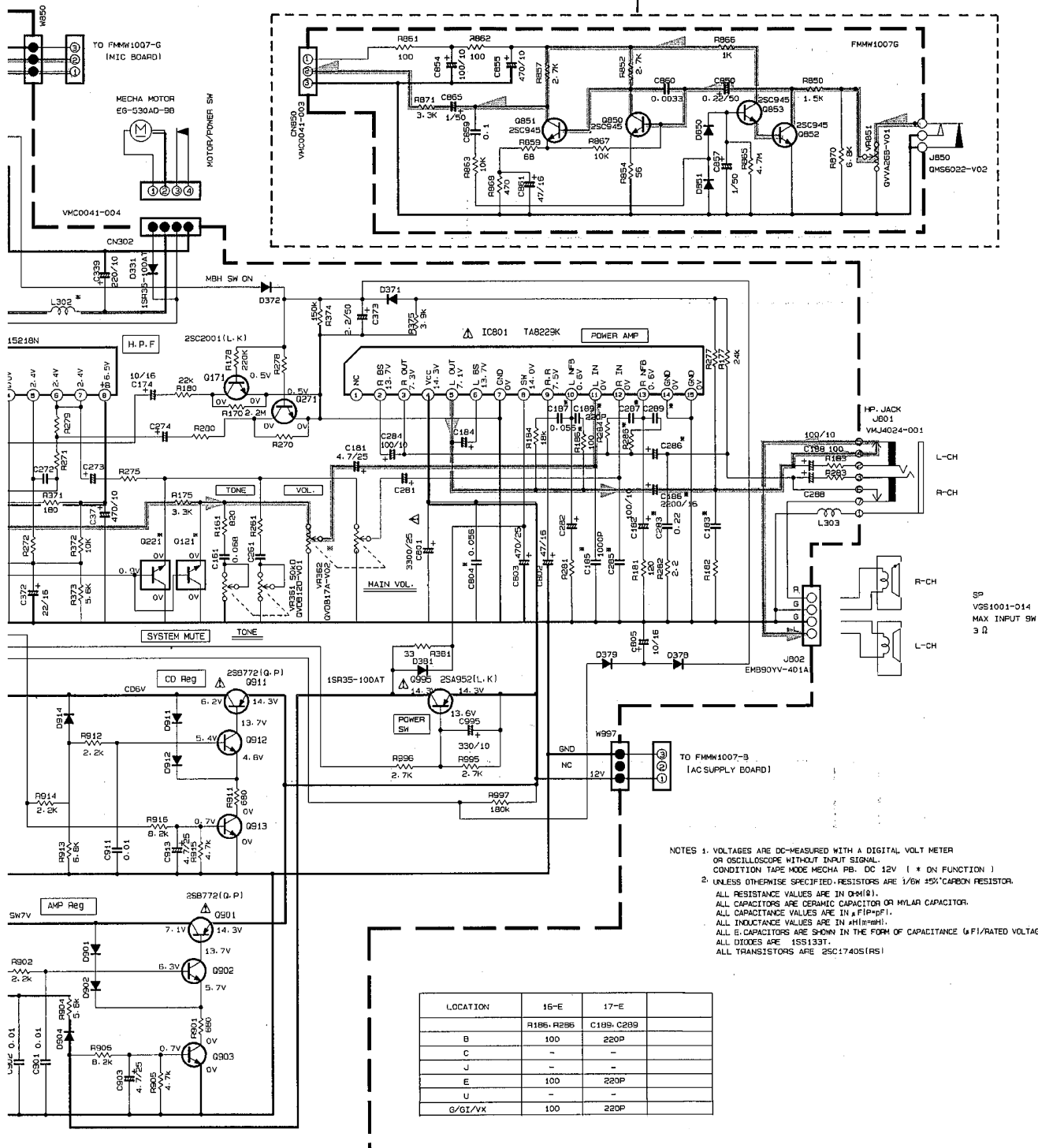
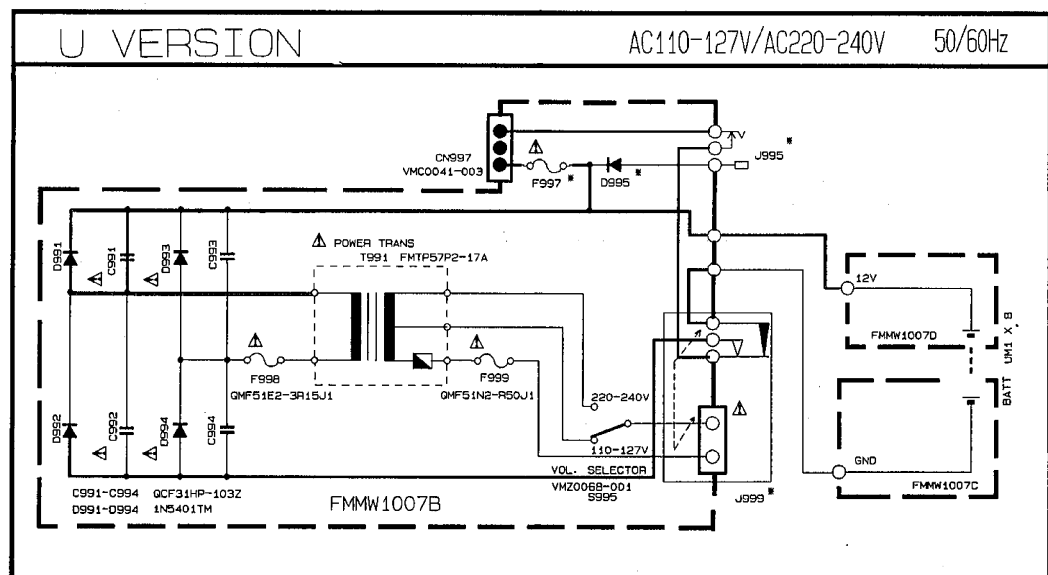
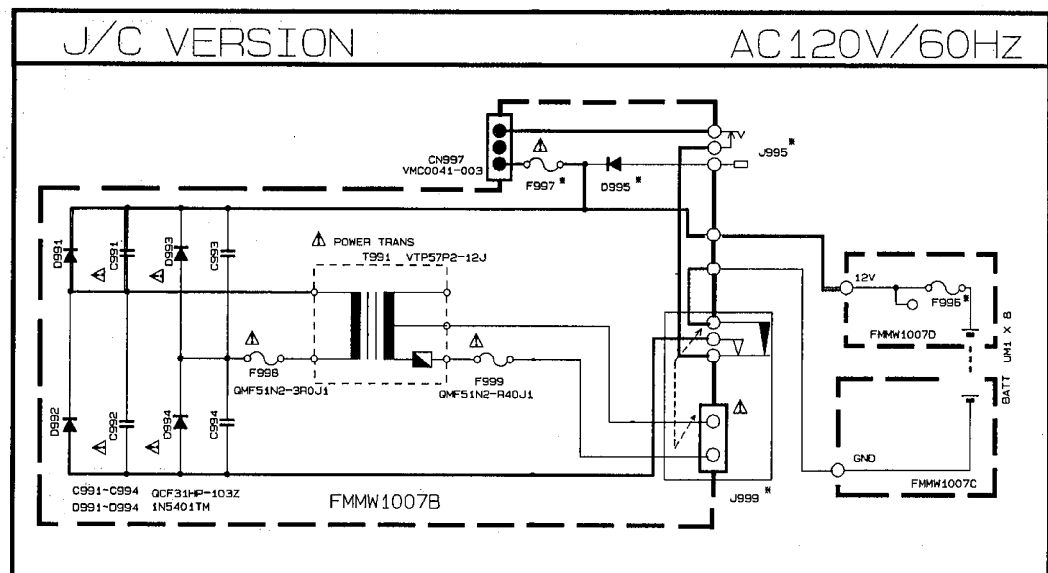


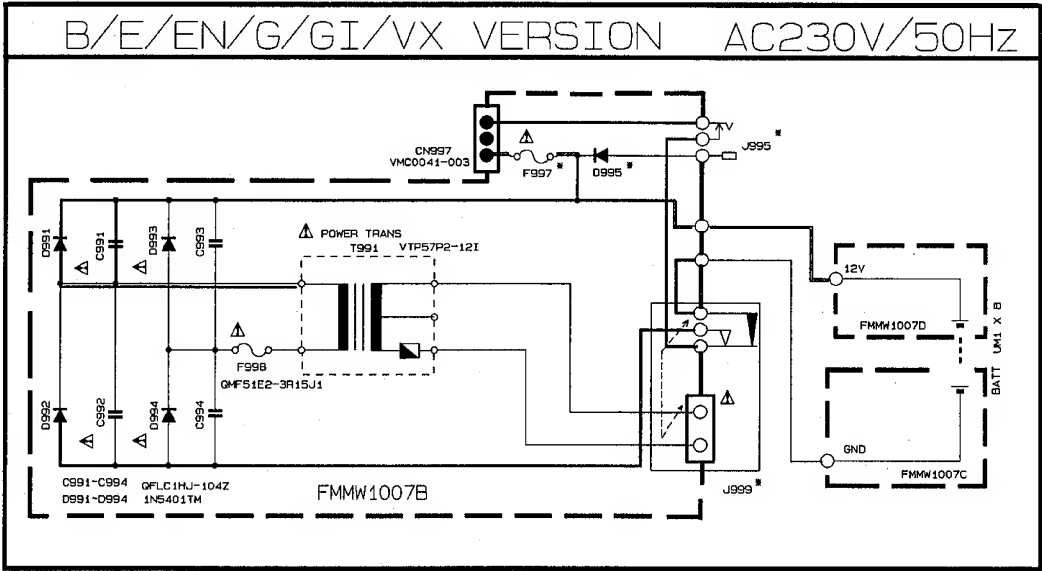
Fig. 12-1

■ Power supply circuit : Drawing No. FMDH7003-006AW



※ MARK REF. NO PARTS

VERSION	F997	F996	J999	J995	D995	
B	BUS	BUS	QMC0263-004	-	-	QMF
C	QMF51N2-3R0J1 3A/250V	QMF51N2-3R0J1	QMC8251-V01	-	-	QMF
J	BUS	BUS	QMC8251-V01	-	-	QMF
E/EN	QMF51E2-3R15J1 T 3.15A	BUS	QMC0263-004	QMA431B-V01	1N5401TH	QMF
U	QMF51E2-3R15J1 T 3.15A	BUS	QMC0263-004	QMA431B-V01	1N5401TH	QMF
G/GI/VX	BUS	BUS	QMC0263-004	-	-	QMF

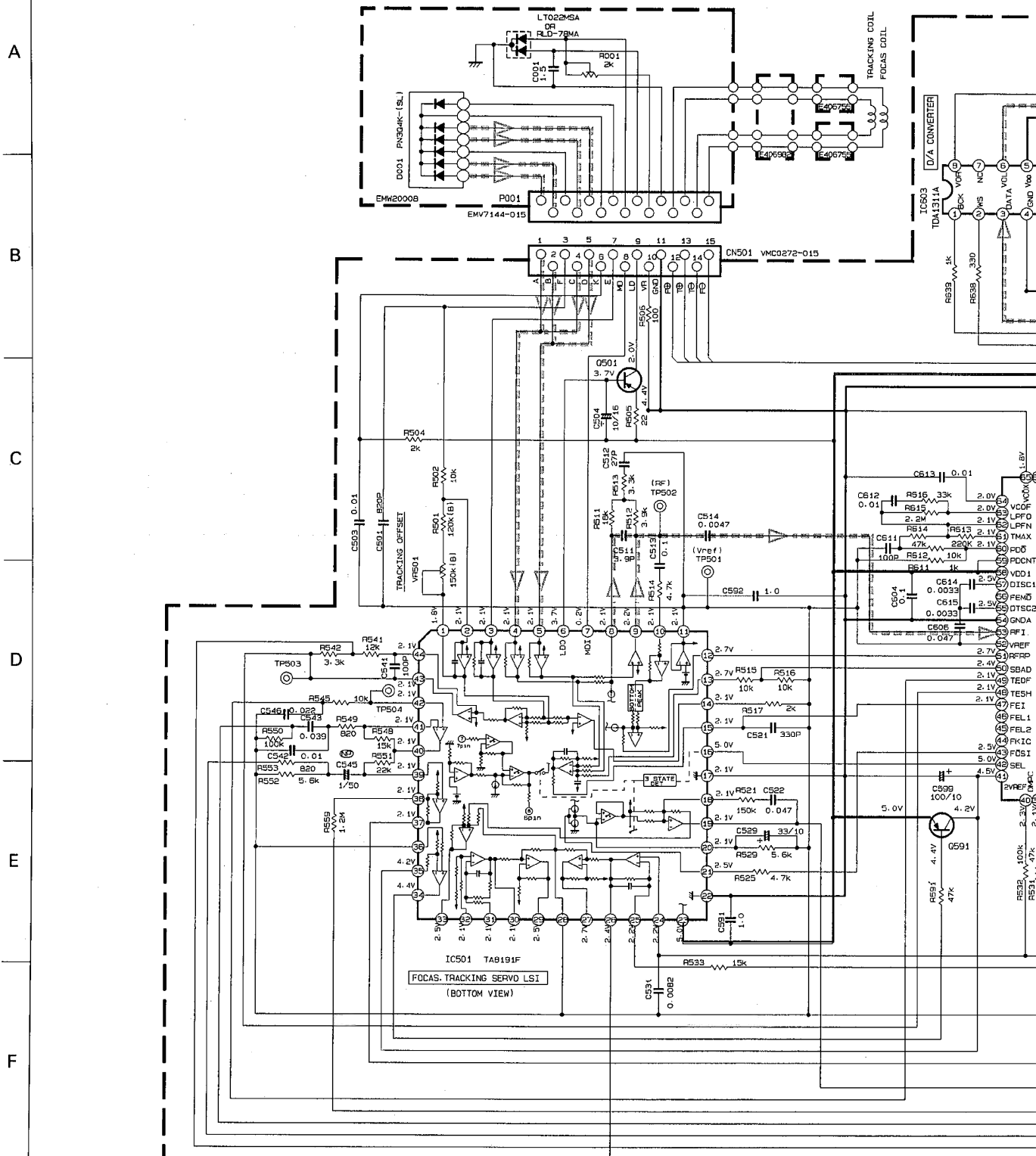


5	POWER CORD
	QMP5E20-183
	QMP1350-183
	QMP1350-183
1TM	QMP39F0-183
1TM	QMP7350-150
	QMP39F0-183

Fig. 12-2

+B Line

■ CD amplifier circuit : Drawing No. FMDH7003-006CV (All version)



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER IN PLAYBACK
2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/6W $\pm 5\%$ CARBON RESISTOR.
ALL RESISTANCE VALUES ARE IN Ω (H).
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
ALL CAPACITANCE VALUES ARE IN μ F(pF).
ALL INDUCTANCE VALUES ARE IN μ H(mH).
ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE \times RATED VOLTAGE (V).

Q501	2SA952(L, K)
Q581	
Q591	2SA1309(R, S) OR 2SA1175(HFE) OR 2SA933S(RS)
Q651	UN4115 OR DTA114TS
Q661	UN4215 OR DTC114TS
Q671	

Q671, Q661

Q651

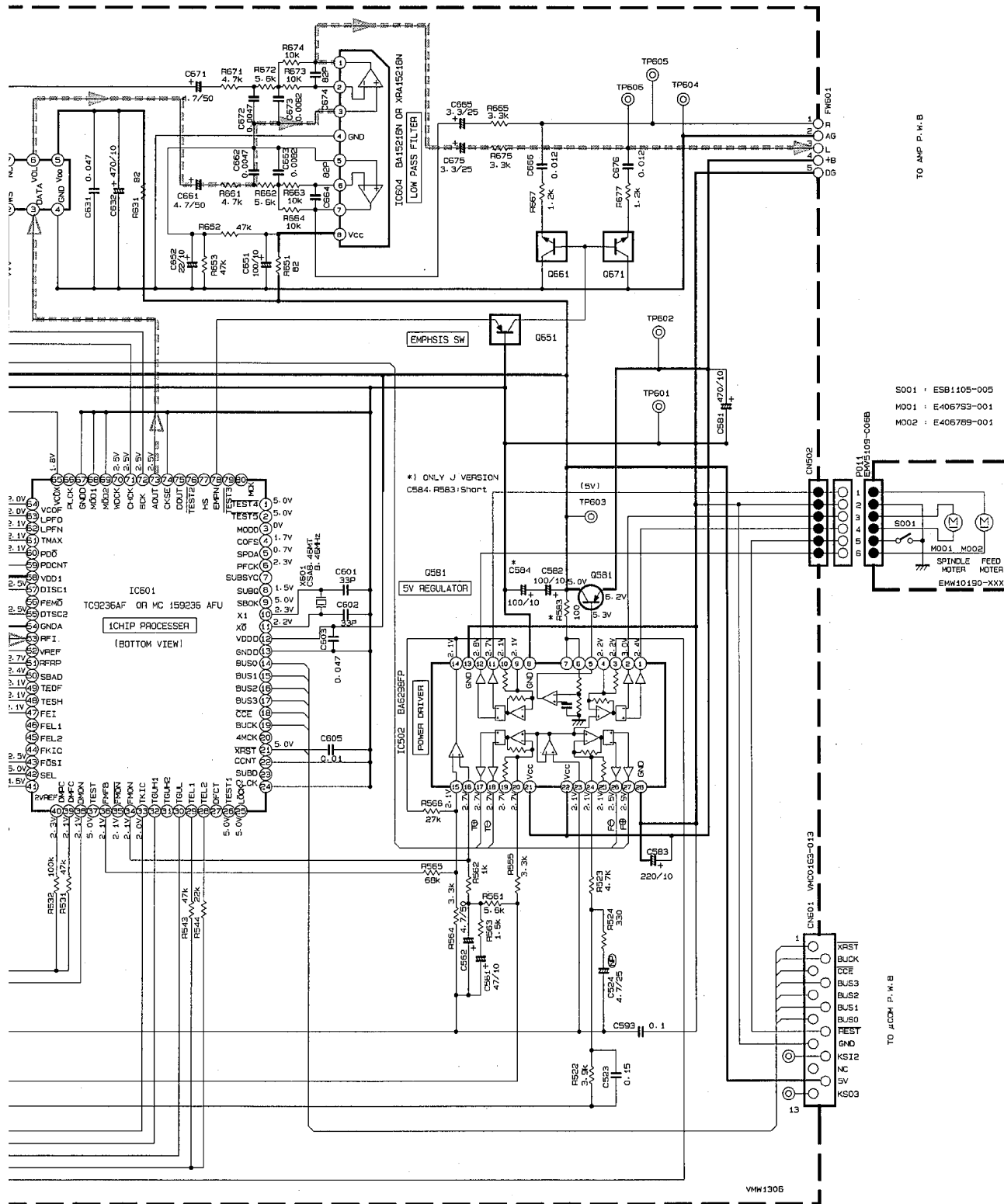





Fig. 12-3

 CD Digital signal
 CD Analoge signal
 +B Line

■ LCD & microcomputer circuit : Drawing No. FMDH7003-006SW (All version)

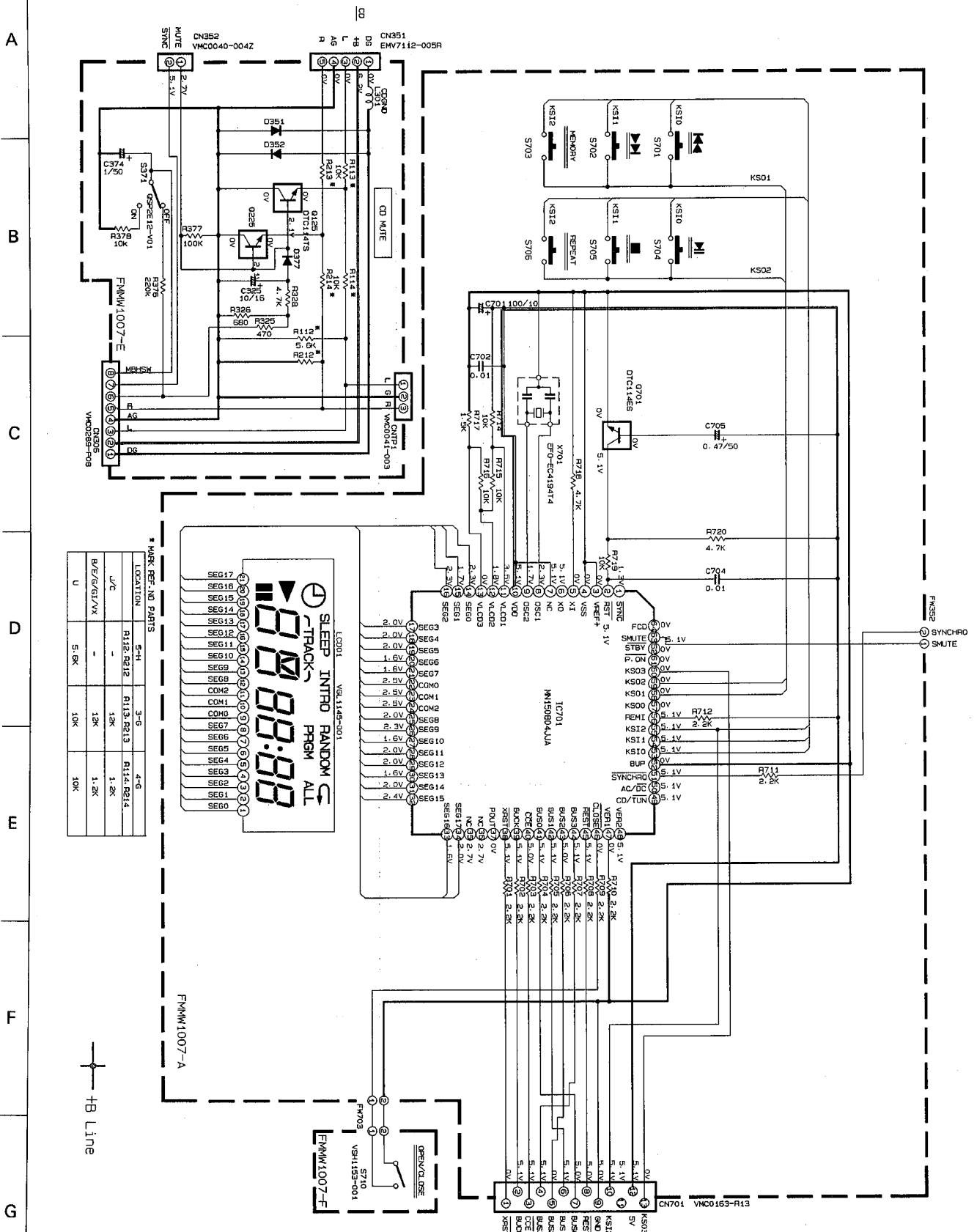


Fig. 12-4

6

7

8

9

10

■ Tuner circuit : Drawing No. FMDH7003-006TW (C/J version)

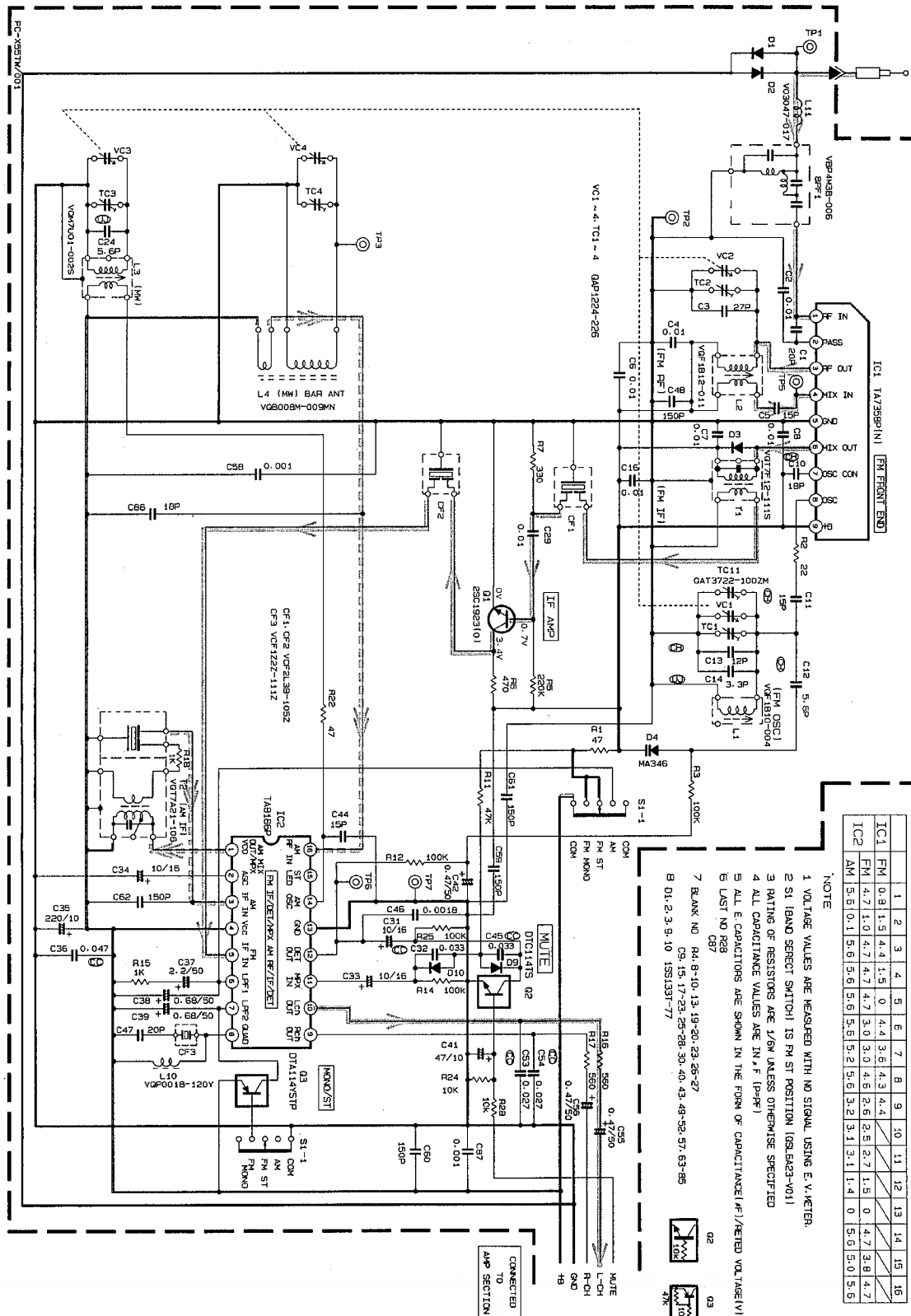


Fig. 12-5

■ Tuner circuit : Drawing No. FMDH7003-005TW (B/E/G version)

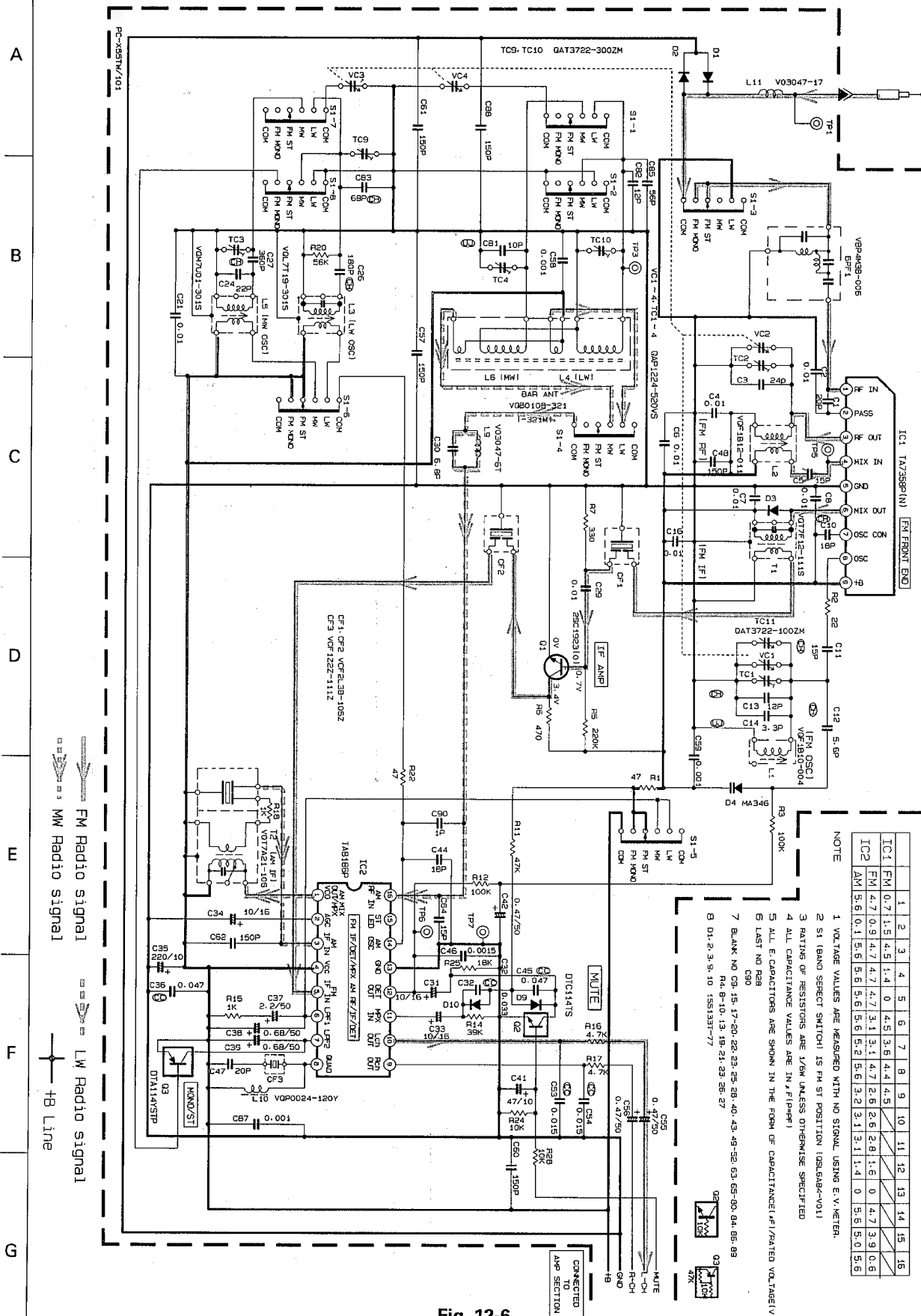


Fig. 12-6

■ Tuner circuit : Drawing No. FMDH7003-012TW (VX version)

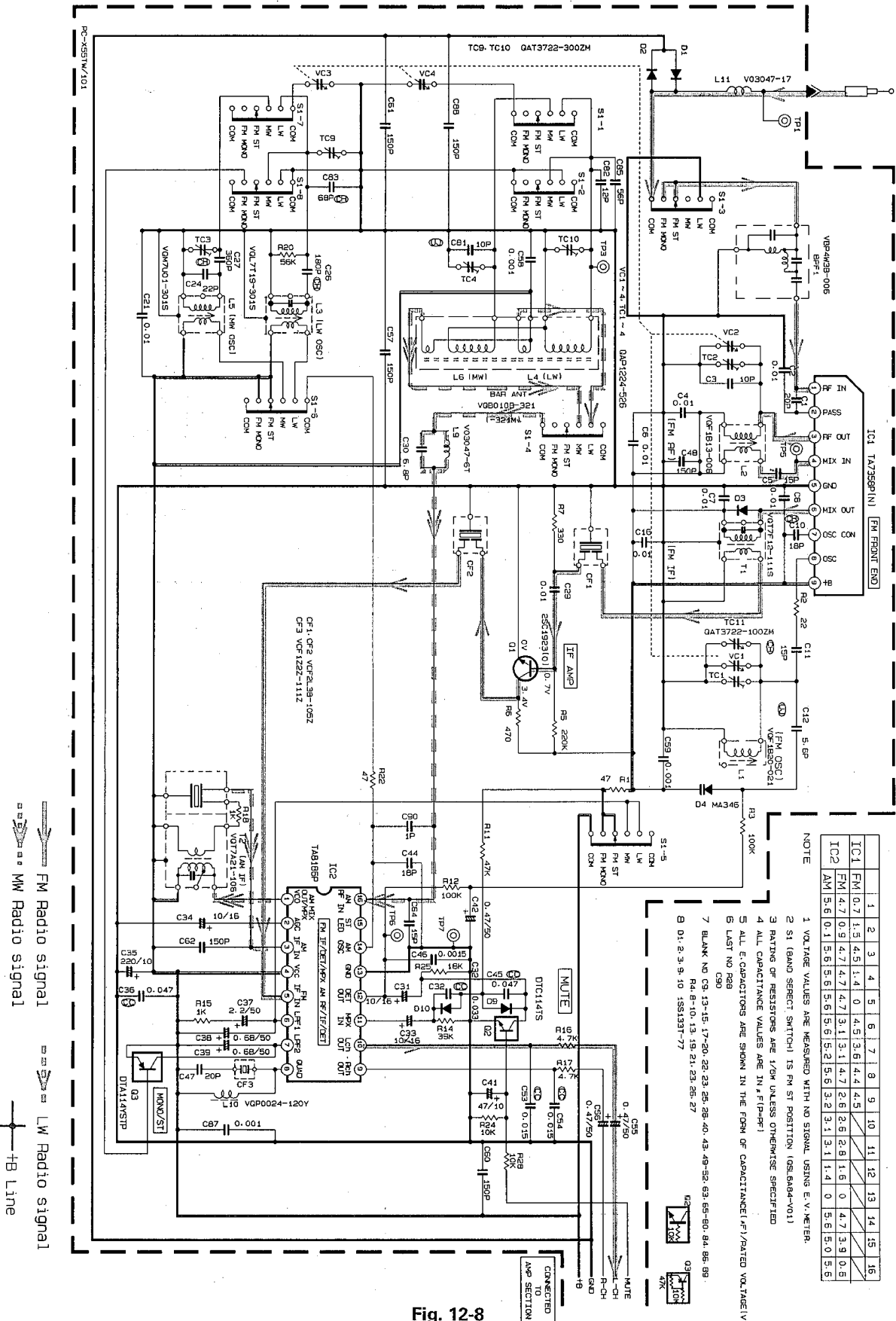
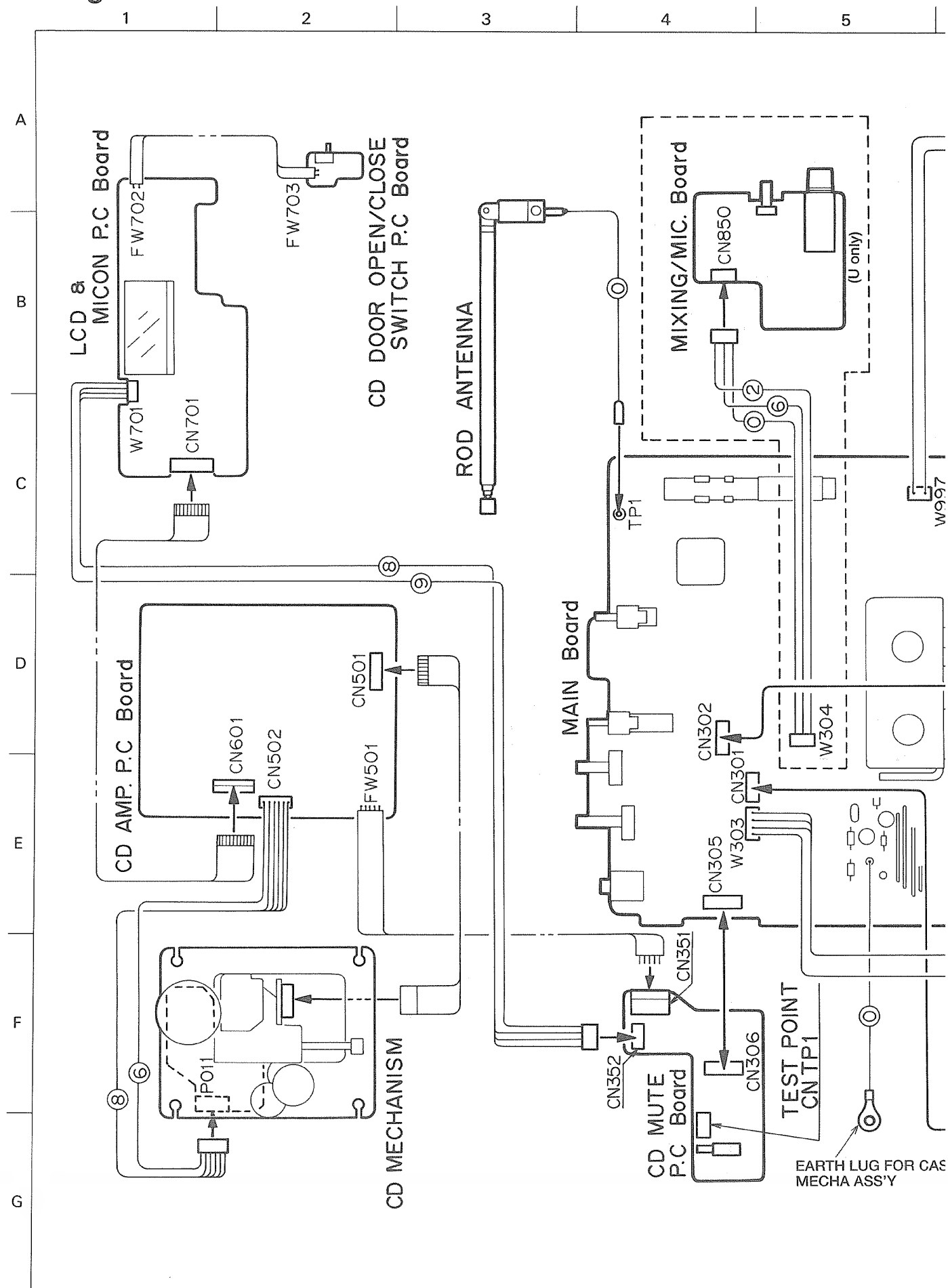


Fig. 12-9

13. Wiring Connections



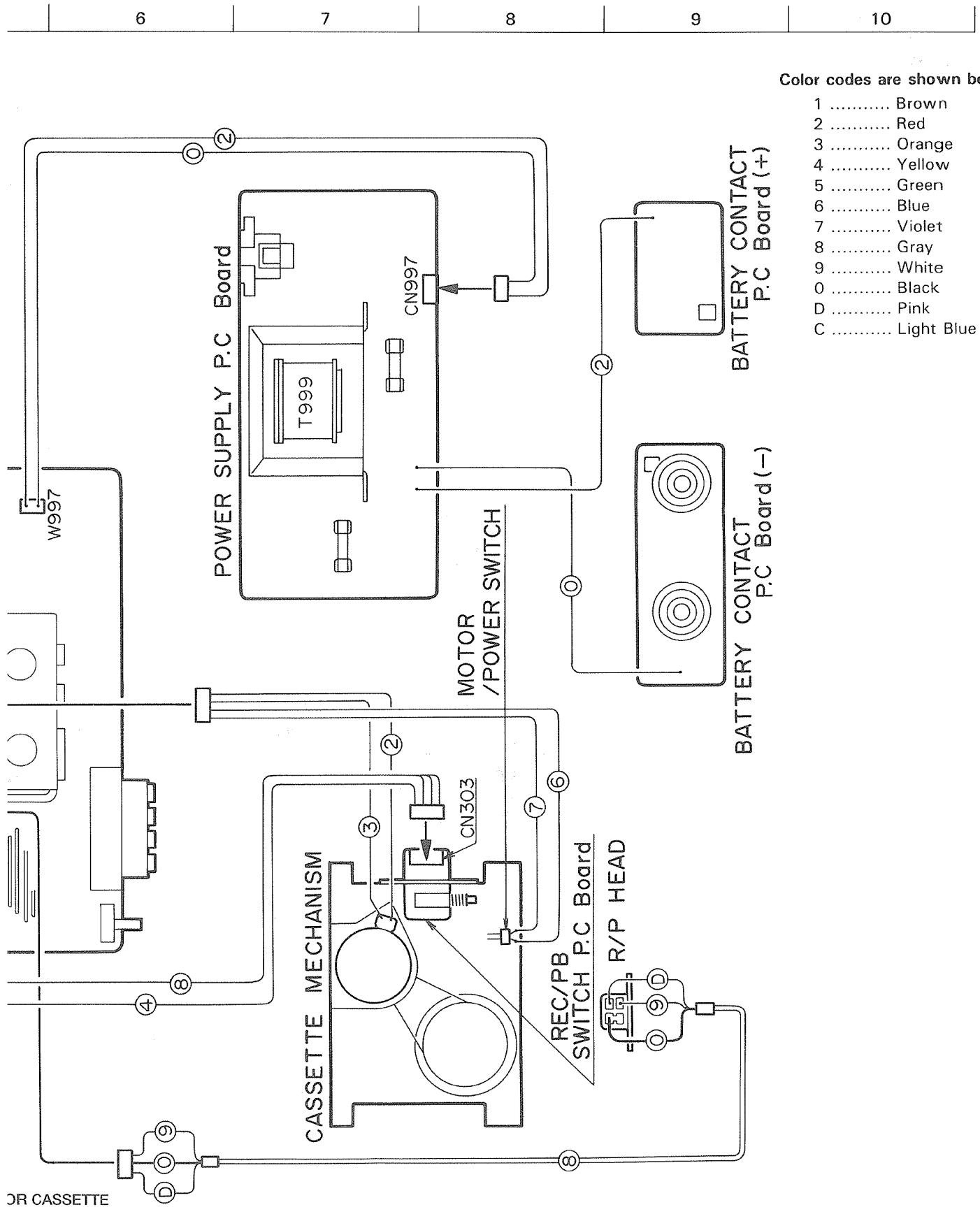


Fig. 13-1

14. Location of P.C. Board Parts

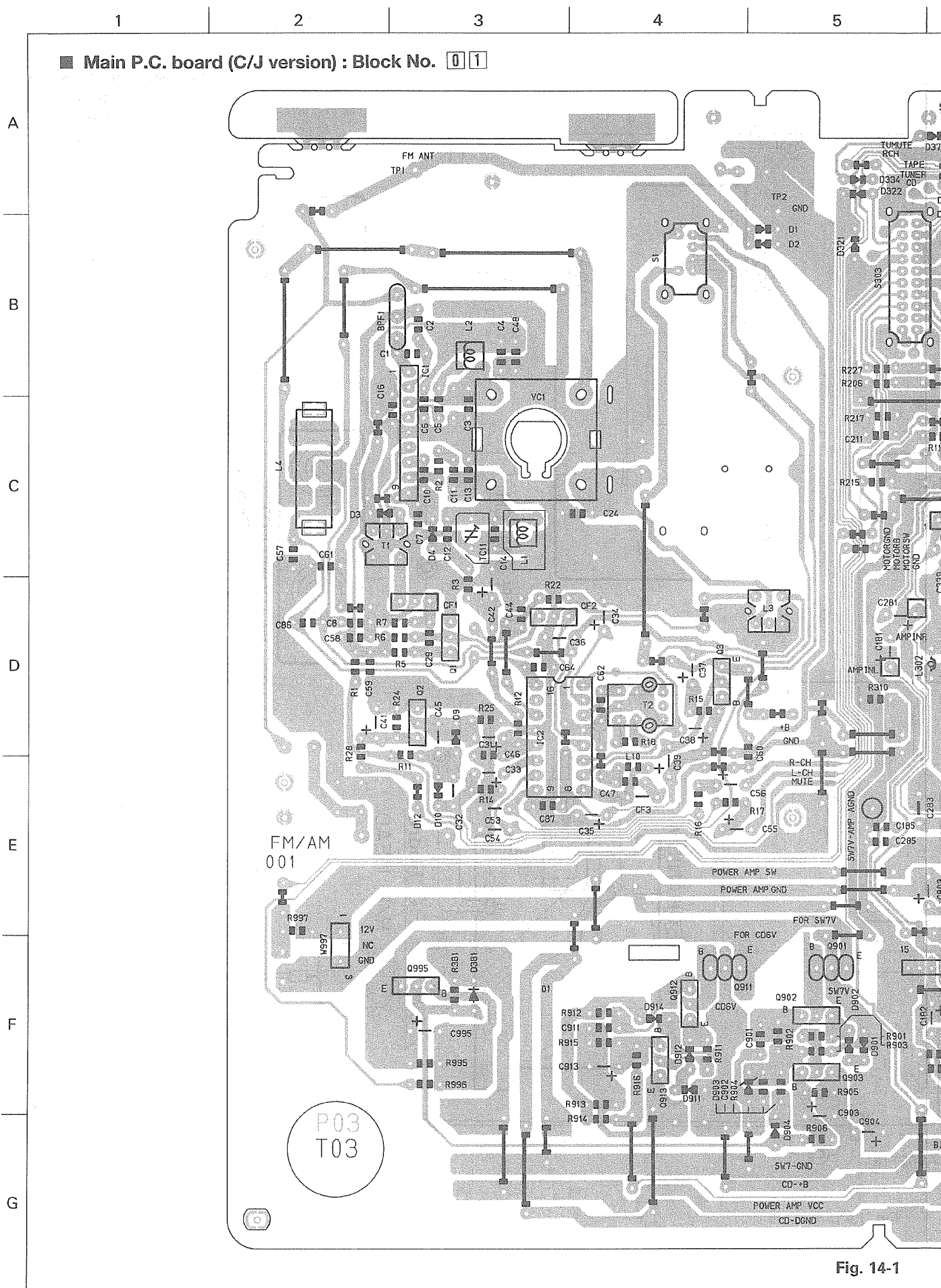
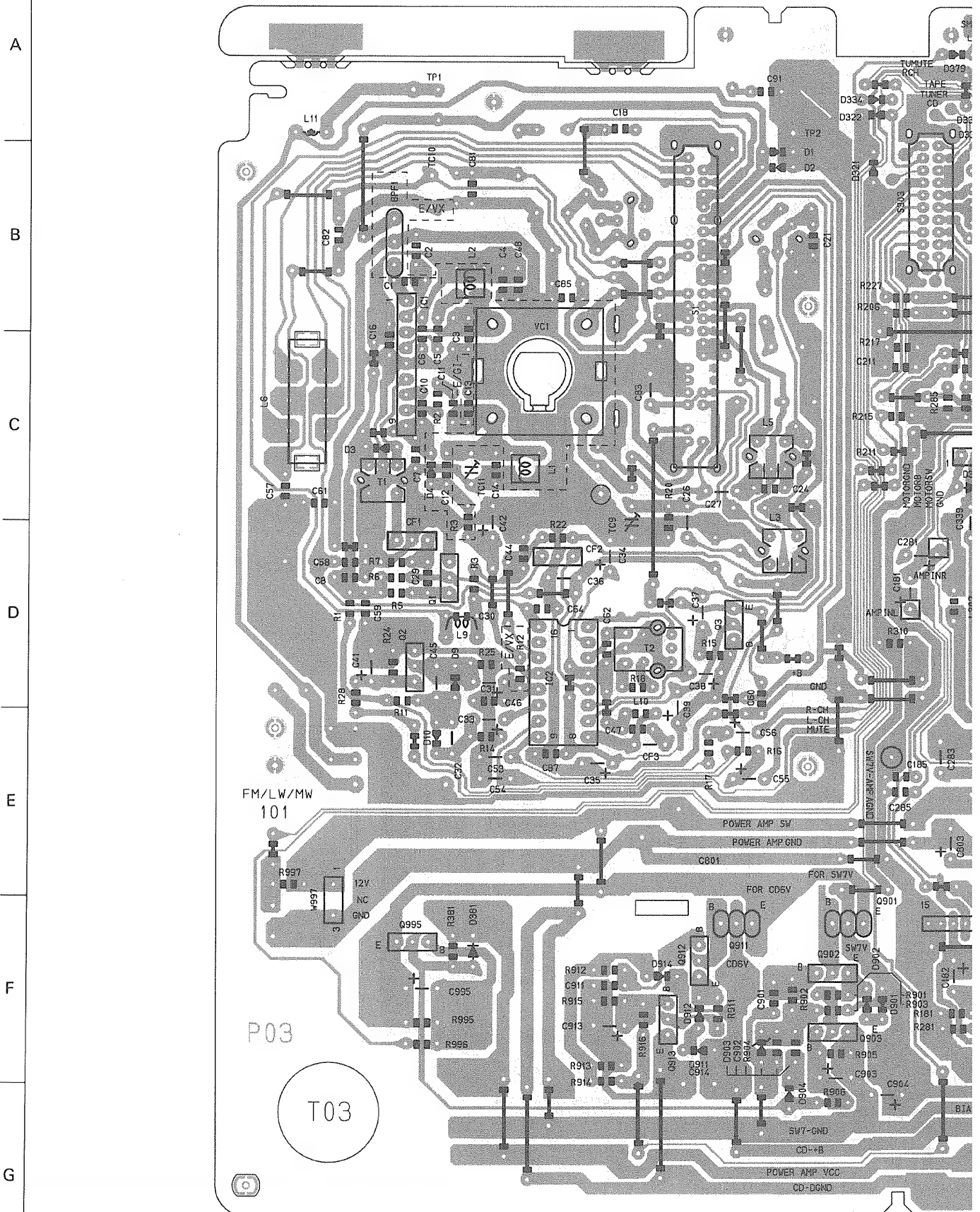


Fig. 14-1



■ Main P.C. board (B/E/G/GI/VX version) : Block No.

0	1
---	---



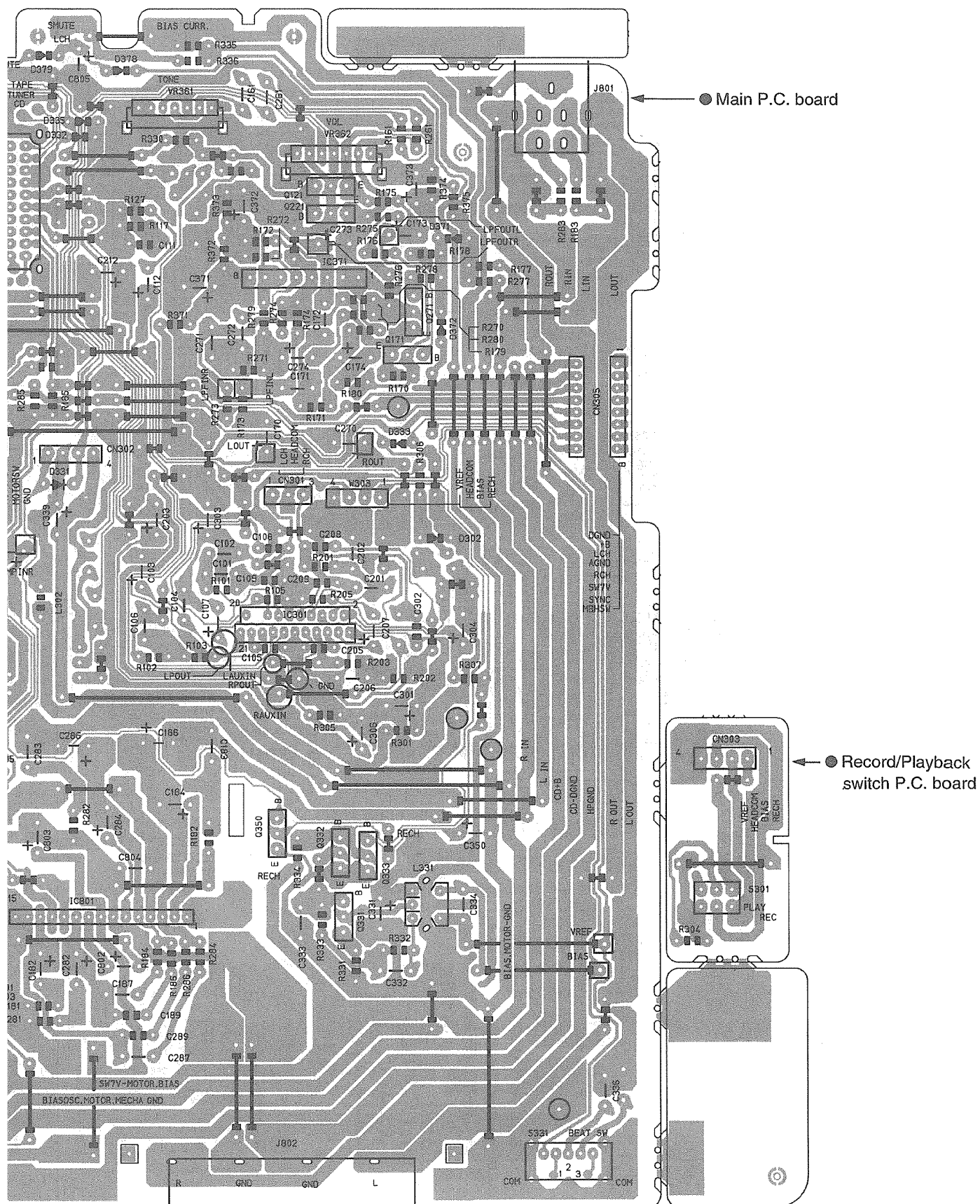
6

7

8

9

10



■ Main P.C. board (U version) : Block No. 01

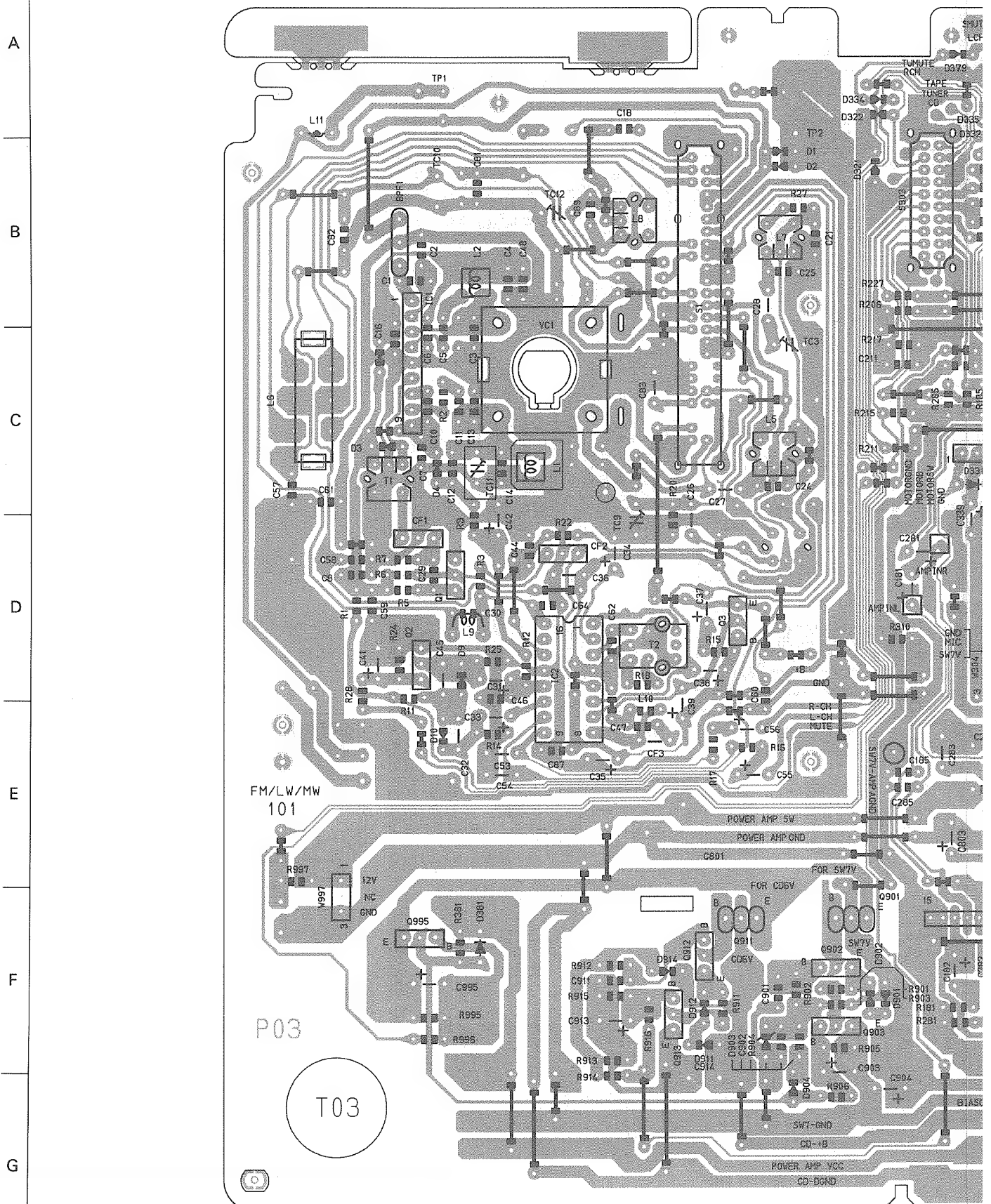
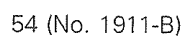


Fig. 14-3



1

2

3

4

5

■ Power supply/LCD & microcomputer P.C. board (C/J/U version) : Block No. 0 2

A

B

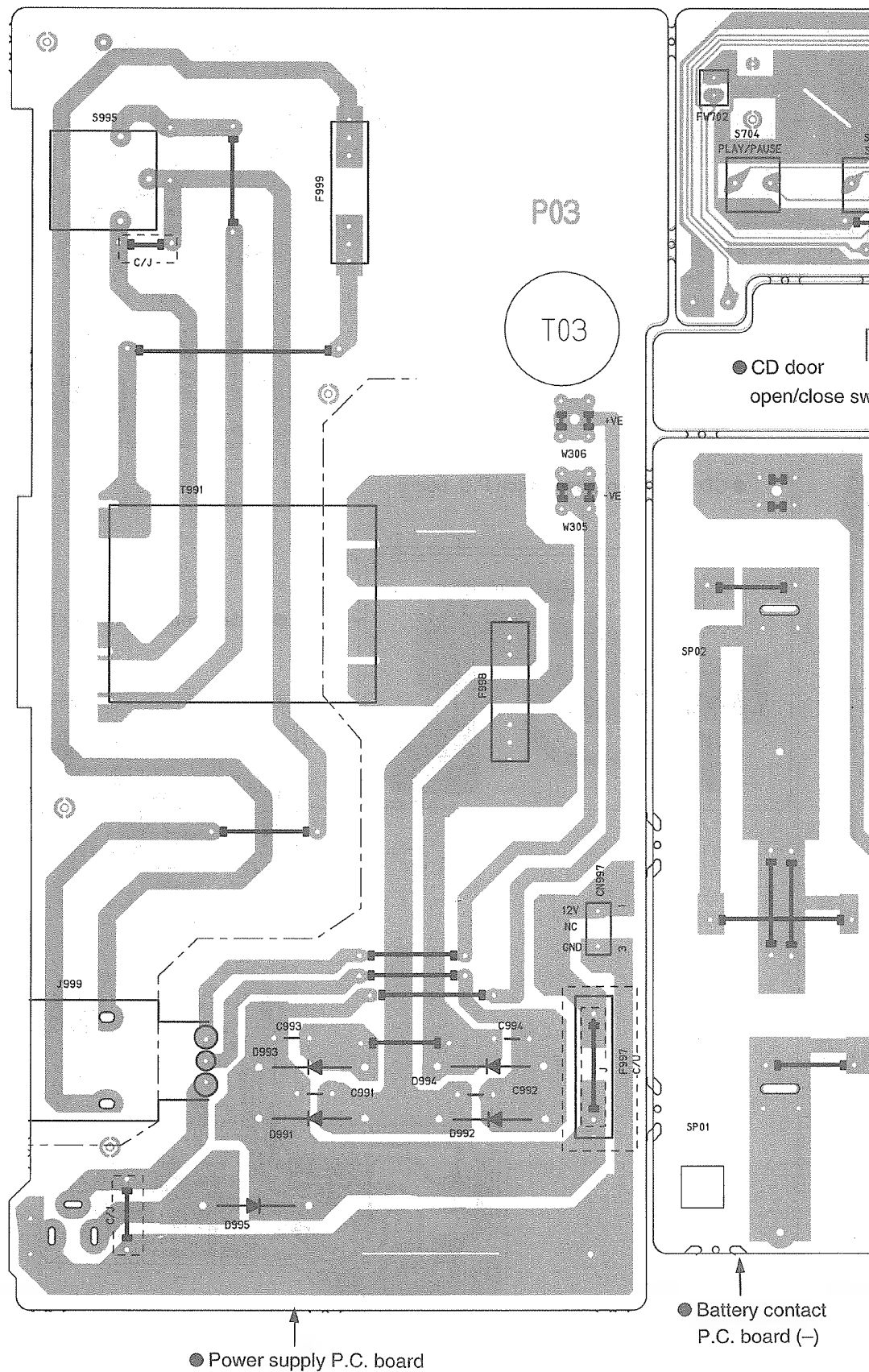
C

D

E

F

G



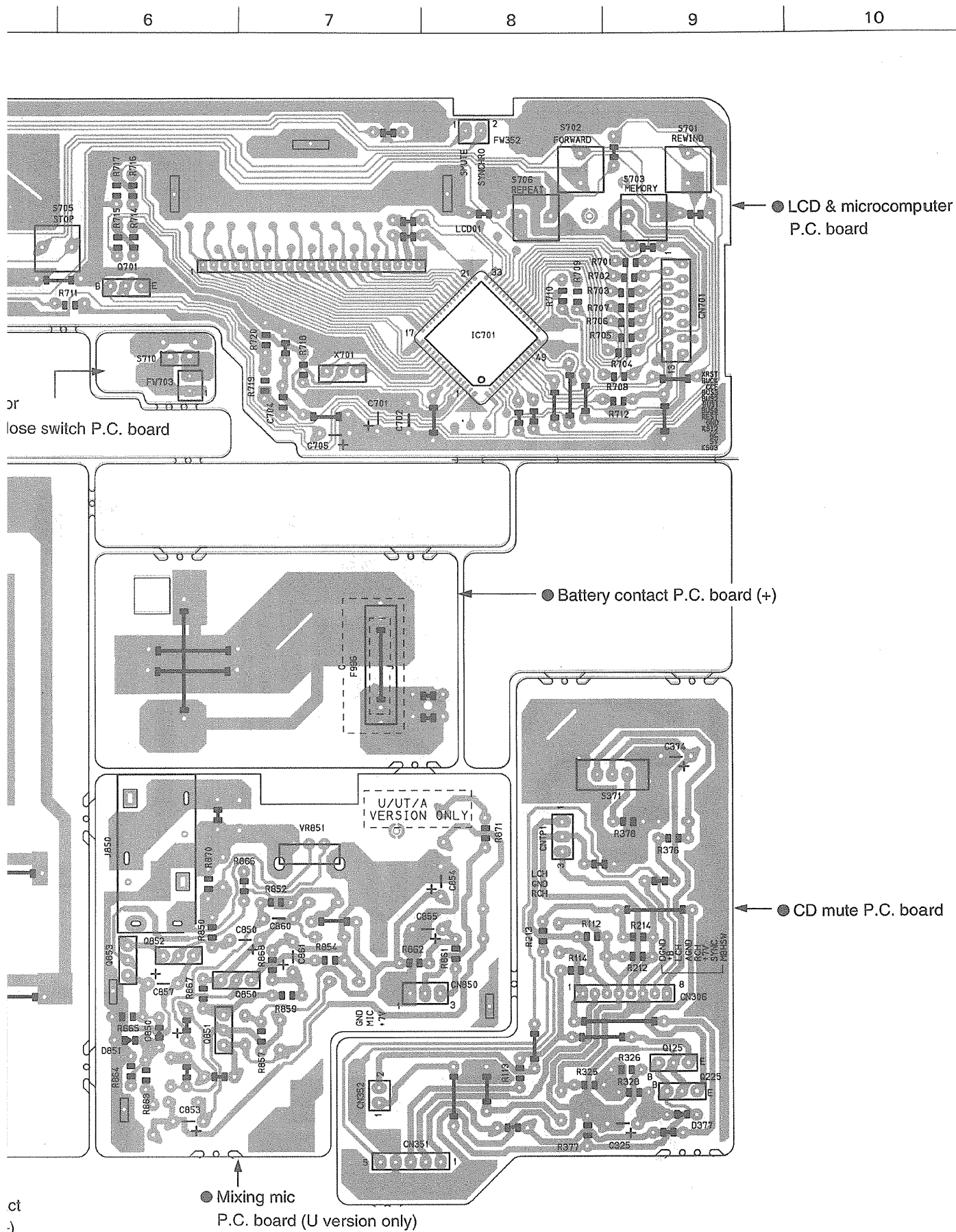
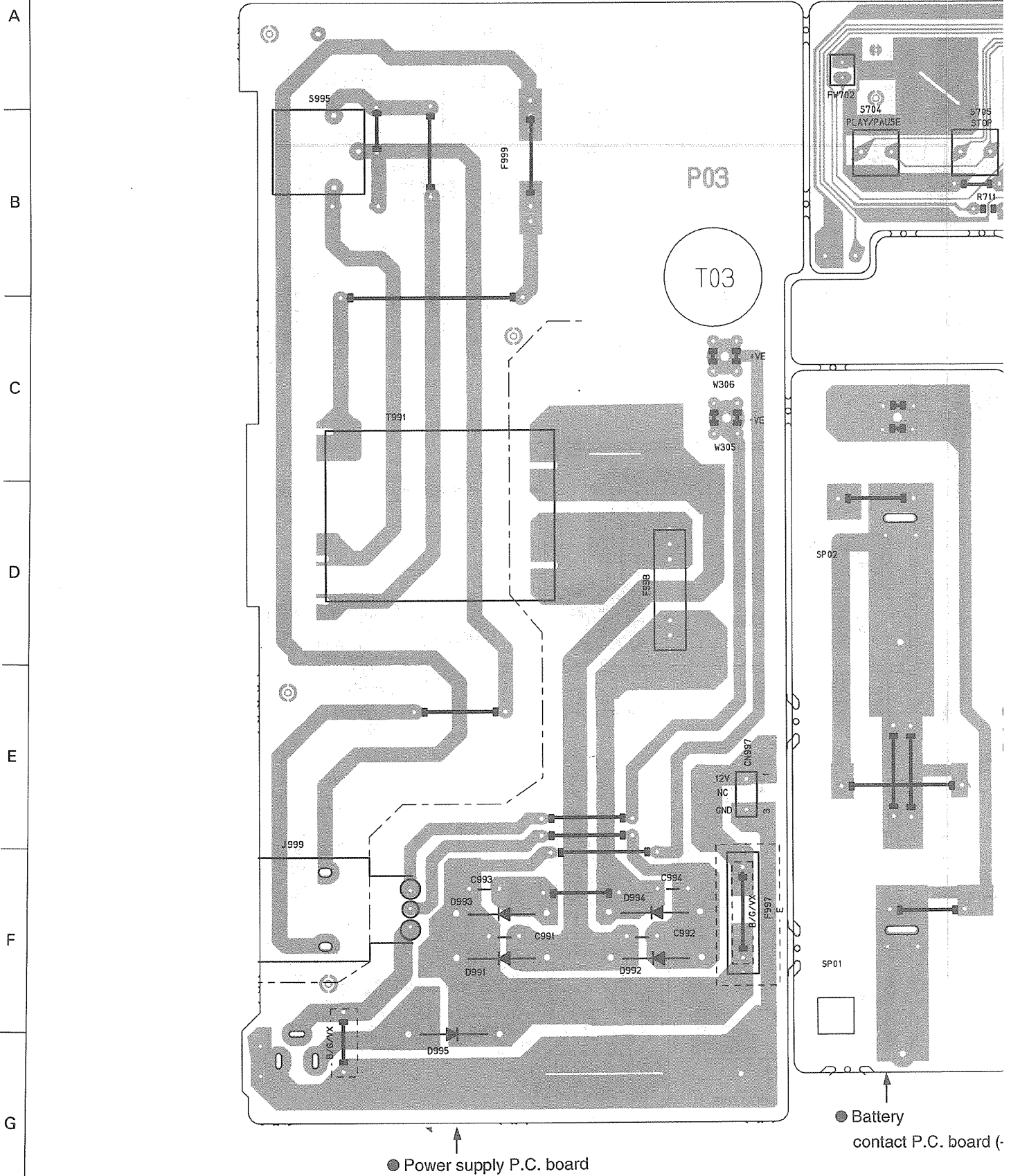


Fig. 14-4

■ Power supply/LCD & microcomputer P.C. board (B/E/G/GI/VX version) : Block No. 0 2



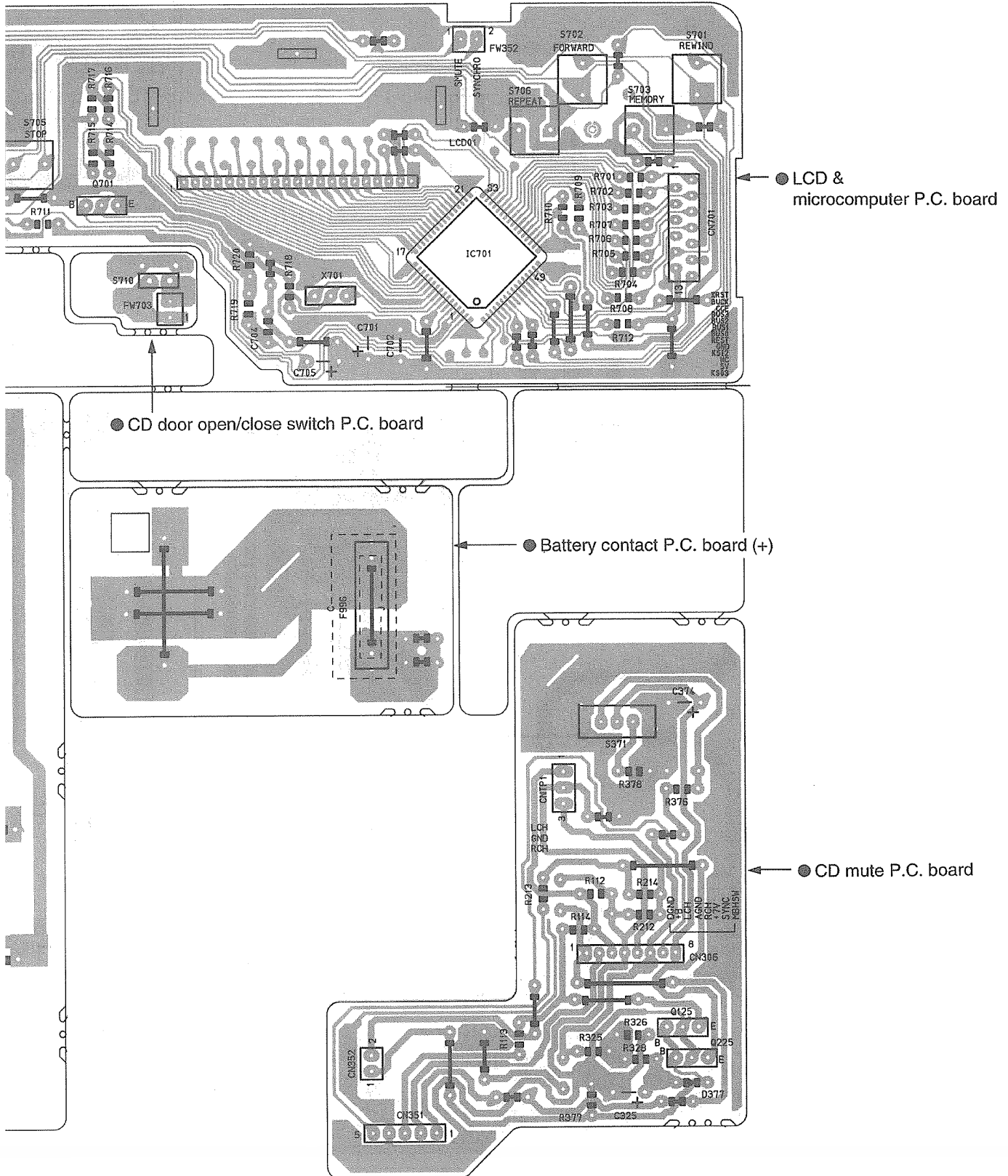
6

7

8

9

10



board (-)

Fig. 14-5

■ CD amplifier P.C. board : Block No. 0 3

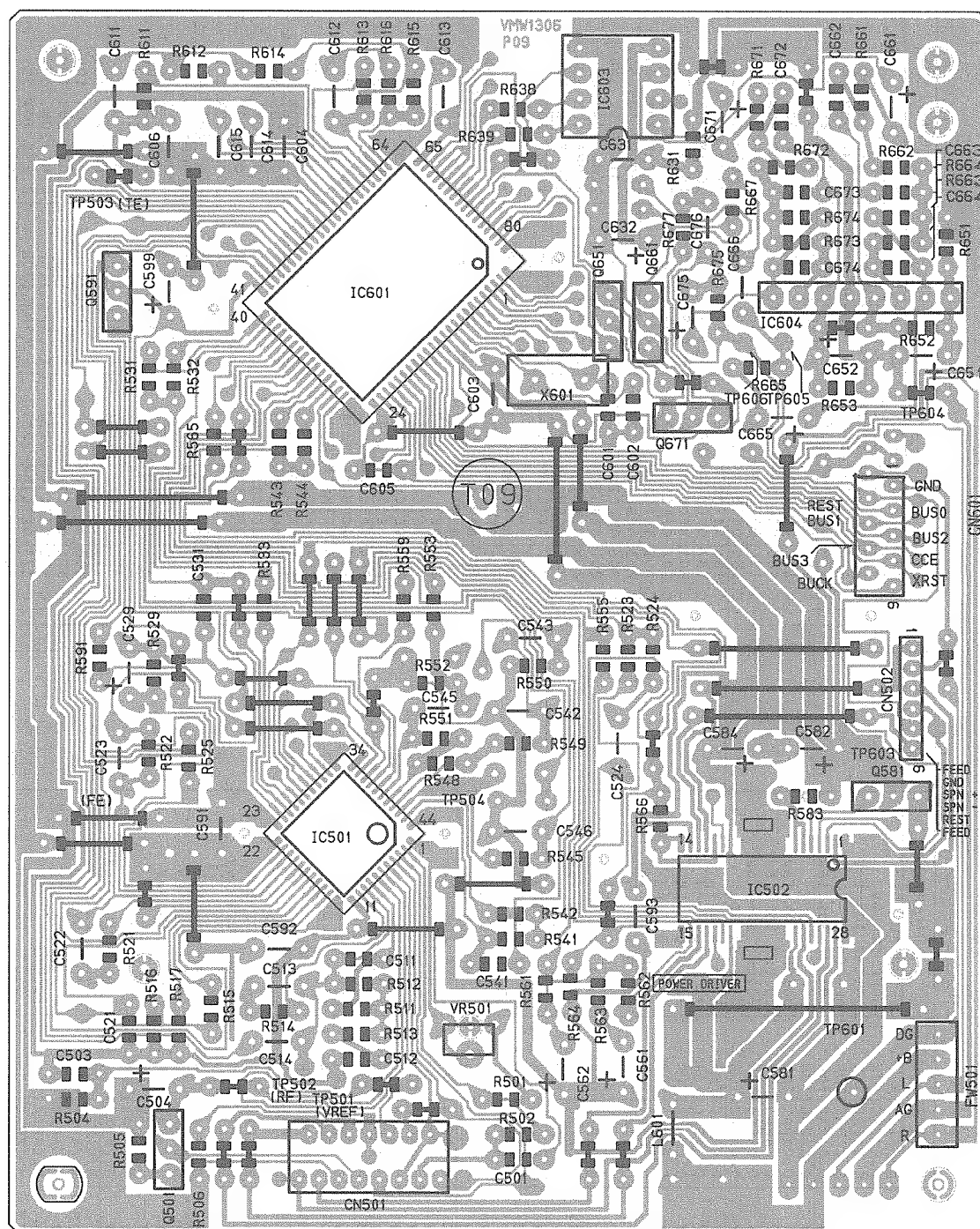


Fig. 14-6

15. Electrical Parts

Main P.C. Board

BLOCK NO. 01					BLOCK NO. 02				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
BPF 1	VBP4M3B-005	BP FILTER	J-C,U-EUROPE		C 170	QETC1HM-475Z	E-CAPACITOR	4.7MF 20% 50V	
C 1	QCSB1HJ-200Y	C-CAPACITOR	20PF 5% 50V		C 171	QFLC1HJ-333ZM	M-CAPACITOR	.033MF 5% 50V	
C 2	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V		C 172	QFV41HJ-104ZM	TF-CAPACITOR	.10MF 5% 50V	
C 3	QCSB1HJ-270Y	C-CAPACITOR	J-C ONLY		C 173	QER61HM-475ZM	E-CAPACITOR	4.7MF 20% 50V	
C 4	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V		C 174	QETC1HM-105Z	E-CAPACITOR	1.0MF 20% 50V	
C 5	QCSB1HJ-150Y	C-CAPACITOR	15PF 5% 50V		C 181	QETC1HM-224Z	E-CAPACITOR	.22MF 20% 50V	
C 6	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V		C 182	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 7	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V		C 183	QETC1EM-104V	C-CAPACITOR	.10MF 20% 25V	
C 8	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V		C 184	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 10	QCT30CH-180Y	C-CAPACITOR	18PF 5% 50V		C 185	QCB1HK-561Y	C-CAPACITOR	560PF 10% 50V	
C 11	QCT30CH-150Y	C-CAPACITOR	15PF 5% 50V		C 186	QETM1CM-228	E-CAPACITOR	2200MF 20% 16V	
C 12	QCT30CH-566Y	C-CAPACITOR	J-C,B,G,E-EN		C 187	QFLC1HJ-683	M-CAPACITOR	.068MF 5% 50V	
C 13	QCT30CH-120Y	C-CAPACITOR	J-C,B,G,E-EN		C 201	QFLB1HJ-152	M-CAPACITOR	1500PF 5% 50V	
C 14	QCT30UJ-3R3Y	C-CAPACITOR	J-C,B,G,E-EN		C 202	QFLC1HJ-562ZM	M-CAPACITOR	5600PF 5% 50V	
C 16	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V		C 203	QETC1HM-475Z	E-CAPACITOR	4.7MF 20% 50V	
C 24	QCT30UJ-5R6Y	C-CAPACITOR	J-C ONLY	J-C	C 205	QCB1HK-102Y	C-CAPACITOR	1000PF 10% 50V	
C 29	QCVB1CN-103Y	C-CAPACITOR	.010MF 30% 16V		C 206	QFLC1HJ-183ZM	M-CAPACITOR	.018MF 5% 50V	
C 31	QETC1CM-106Z	E-CAPACITOR	10MF 20% 16V		C 207	QEK61CM-226ZM	E-CAPACITOR	22MF 20% 16V	
C 32	QCC31EM-333ZV	C-CAPACITOR	.033MF 20% 25V		C 208	QCB1HK-221Y	C-CAPACITOR	220PF 10% 50V	
C 33	QETC1CM-106Z	E-CAPACITOR	10MF 20% 16V		C 211	QCB1HK-221Y	C-CAPACITOR	220PF 10% 50V	
C 34	QEK61CM-106Z	E-CAPACITOR	10MF 20% 16V		C 212	QETC1HM-105Z	E-CAPACITOR	1.0MF 20% 50V	
C 35	QETC1CM-227Z	E-CAPACITOR	220MF 20% 10V		C 261	QCC51EM-683ZV	C-CAPACITOR	.068MF 20% 25V	
C 36	QCC11EM-473V	C-CAPACITOR	.047MF 20% 25V		C 270	QETC1HM-475Z	E-CAPACITOR	4.7MF 20% 50V	
C 37	QETC1HM-252ZN	E-CAPACITOR	2.2MF 20% 50V		C 271	QFLC1HJ-333ZM	M-CAPACITOR	.033MF 5% 50V	
C 38	QETC1HM-684Z	E-CAPACITOR	.68MF 20% 50V		C 272	QFV41HJ-104ZM	TF-CAPACITOR	.10MF 5% 50V	
C 39	QETC1HM-684Z	E-CAPACITOR	.68MF 20% 50V		C 273	QER61HM-475ZM	E-CAPACITOR	4.7MF 20% 50V	
C 41	QETC1AM-476Z	E-CAPACITOR	47MF 20% 10V		C 274	QETC1HM-105Z	E-CAPACITOR	1.0MF 20% 50V	
C 42	QETC1HM-474Z	E-CAPACITOR	VX,U ONLY	VX,U	C 281	QETC1HM-224Z	E-CAPACITOR	.22MF 20% 50V	
C 44	QCSB1HJ-150Y	C-CAPACITOR	J-C ONLY	J-C	C 282	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 45	QCC31EM-333ZV	C-CAPACITOR	J-C,U ONLY	J-C,U	C 283	QCC11EM-104V	C-CAPACITOR	.10MF 20% 25V	
C 46	QCB1HK-182Y	C-CAPACITOR	J-C,U ONLY	J-C,U	C 284	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 47	QCSB1HJ-200Y	C-CAPACITOR	20PF 5% 50V		C 285	QCB1HK-561Y	C-CAPACITOR	560PF 10% 50V	
C 48	QCB1HK-151Y	C-CAPACITOR	150PF 10% 50V		C 286	QETM1CM-228	E-CAPACITOR	2200MF 20% 16V	
C 53	QCC31EM-273ZV	C-CAPACITOR	J-C ONLY	J-C	C 287	QFLC1HJ-683	M-CAPACITOR	.068MF 5% 50V	
C 54	QCC31EM-273ZV	C-CAPACITOR	J-C ONLY	J-C	C 301	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 55	QETC1HM-474Z	E-CAPACITOR	.47MF 20% 50V		C 302	QCB1HK-151Y	C-CAPACITOR	150PF 10% 50V	
C 56	QETC1HM-474Z	E-CAPACITOR	.47MF 20% 50V		C 303	QETC1AM-336ZM	E-CAPACITOR	33MF 20% 10V	
C 58	QCB1HK-102Y	C-CAPACITOR	1000PF 10% 50V		C 304	QETC1CM-107	E-CAPACITOR	100MF 20% 16V	
C 59	QCB1HK-151Y	C-CAPACITOR	J-C ONLY	J-C	C 306	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 60	QCB1HK-151Y	C-CAPACITOR	150PF 10% 50V		C 331	QETC1AM-476Z	E-CAPACITOR	47MF 20% 10V	
C 61	QCB1HK-151Y	C-CAPACITOR	150PF 10% 50V		C 332	QCY31HK-472Z	C-CAPACITOR	4700PF 10% 50V	
C 62	QCB1HK-151Y	C-CAPACITOR	150PF 10% 50V		C 333	QCY31HK-682Z	C-CAPACITOR	6800PF 10% 50V	
C 86	QCSB1HJ-180Y	C-CAPACITOR	J-C ONLY	J-C	C 334	QFLB1HJ-182	M-CAPACITOR	1800PF 5% 50V	
C 87	QCB1HK-102Y	C-CAPACITOR	J-C,U-EUROPE	J-C,U	C 336	QCS1HJ-121Z	C-CAPACITOR	120PF 5% 50V	
C 91	QCB1HK-102Y	C-CAPACITOR	1000PF 10% 50V		C 338	QETC1AM-476Z	E-CAPACITOR	U ONLY USE	U
C 101	QFLB1HJ-152	M-CAPACITOR	1500PF 5% 50V		C 339	QETC1AM-227Z	E-CAPACITOR	220MF 20% 10V	
C 102	QFLC1HJ-562ZM	M-CAPACITOR	5600PF 5% 50V		C 350	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 103	QETC1HM-475Z	E-CAPACITOR	4.7MF 20% 50V		C 371	QETC1AM-107ZN	E-CAPACITOR	100MF 20% 10V	
C 105	QCB1HK-102Y	C-CAPACITOR	1000PF 10% 50V		C 372	QETC1CM-476Z	E-CAPACITOR	47MF 20% 16V	
C 106	QFLC1HJ-183ZM	M-CAPACITOR	.018MF 5% 50V		C 373	QETC1HM-225ZN	E-CAPACITOR	2.2MF 20% 50V	
C 107	QEK61CM-226ZM	E-CAPACITOR	22MF 20% 16V		C 801	QETM1EM-338	E-CAPACITOR	3300MF 20% 25V	
C 108	QCB1HK-221Y	C-CAPACITOR	220PF 10% 50V		C 802	QETC1CM-476Z	E-CAPACITOR	47MF 20% 16V	
C 111	QCB1HK-221Y	C-CAPACITOR	220PF 10% 50V		C 803	QETC1EM-227Z	E-CAPACITOR	220MF 20% 25V	
C 112	QETC1HM-105Z	E-CAPACITOR	1.0MF 20% 50V		C 804	QFLB1HJ-563	M-CAPACITOR	.056MF 5% 50V	
C 161	QCC31EM-683ZV	C-CAPACITOR	.068MF 20% 25V		C 805	QETC1CM-106Z	E-CAPACITOR	10MF 20% 16V	

BLOCK NO. 09					
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	
A C 901	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V		
C 902	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V		
C 903	QETC1EM-4752M	E. CAPACITOR	4.7MF 20% 25V		
C 904	QETC1AM-227Z	E. CAPACITOR	220MF 20% 10V		
C 911	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V		
C 913	QETC1EM-4752M	E. CAPACITOR	4.7MF 20% 25V		
A C 995	QETC1AM-3372N	E. CAPACITOR	330MF 20% 10V		
CF 1	VCF2L3B-105	C. FILTER			
CF 2	VCF2L3B-105	C. FILTER			
CF 3	VCF122Z-111Z	C. FILTER			
CN301	VMC0040-003	CONNECTOR	HEAD WIRE		
CN302	VMC0040-004Z	CONNECTOR	MOTOR		
CN303	VMC0041-004	CONNECTOR	R/P SW		
CN305	VMC0289-508	CONNECTOR	CONN. BOARD		
D 1	1SS133	DIODE			
D 2	1SS133	DIODE			
D 3	1SS133	DIODE			
D 4	MA346	VC DIODE	FM AFCCALL EXPG		
D 9	1SS133	DIODE	B/GGI-EEN, J.C. VX		
D 10	1SS133	DIODE			
D 302	RB721Q	S.B. DIODE			
D 321	1SS133	DIODE			
D 322	1SS133	DIODE			
D 331	1SR35-100	SI. DIODE			
D 332	1SS133	DIODE			
D 333	1SS133	DIODE			
D 334	RB721Q	S.B. DIODE			
D 335	RB721Q	S.B. DIODE			
D 371	1SS133	DIODE			
D 378	1SS133	DIODE			
D 379	1SS133	DIODE			
D 381	1SR35-100	SI. DIODE			
D 901	1SS133	DIODE			
D 902	1SS133	DIODE			
D 903	MT6.2JC	Z. DIODE			
D 904	1SS133	DIODE			
D 911	1SS133	DIODE			
D 912	1SS133	DIODE			
D 914	1SS133	DIODE			
IC 1	TA7358P(N)	I.C.	FM FRONT END		
IC 2	TA8186P	I.C.	FM AMF		
IC301	TA7417AP	I.C.	(EQ&REC AMP)		
IC371	BA15218N	I.C.	(OP AMP)		
IC801	TA8229K	IC	(POWER AMP)		
J 801	VMJ4024-001	JACK	HP JACK		
J 802	FMJ4001-001	SPK. TERMINAL	SPEAKER		
L 1	VQF1B20-021	OSC. COIL	FM OSC		VX
L 1	VQF1B10-004	OSC. COIL	J.C.U. EUROPE		
L 2	VQF1B12-011	RF COIL	J.C.U. EUROPE		
L 2	VQF1B13-006	RF COIL	FM RF		VX
L 3	VQF1719-301	OSC. COIL (MW)			B,E,G,GI,VX
L 3	VGM7U01-002	OSC. COIL (MW)	J.C. ONLY		J,C
L 4	FMQB008M-009EN	BAR ANTENNA	AM RF "J.C" ONL		
L 4	FMQB010B-321E	BAR ANTENNA	AM RF		B,E,G,GI,VX
L 4	FMQB010M-305E	BAR ANTENNA	AM RF		U

BLOCK NO. 09					
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	
L 5	VGM7U01-301	OSC. COIL (MW)	AM OSC		B,E,G,GI,VX
L 6	FMQB010M-305E	OSC. COIL (MW)	AM OSC		B,E,G,GI,VX
L 7	VQS7U01-305	OSC. COIL			U
L 8	VQR7002-302	RF COIL			U
L 9	V03047-6	ANTENNA COIL			B,E,G,GI,VX
L 10	VQPO024-120Y	INDUCTOR			
L 11	V03047-16	ANT. COIL			
L 11	V03047-17	ANTENNA COIL			J,C
L 331	VQH7001-028	OSC. COIL (BIAS)			B,E,G,GI,VX
Q 1	2SC1923	TRANSISTOR	FM IF AMP		
Q 2	DTA114TS	TRANSISTOR	MUTE		
Q 3	DTA114TS	TRANSISTOR	MONO ST		
Q 121	DTA114TS	TRANSISTOR			
Q 171	2SC2001(L,K)	TRANSISTOR			
Q 221	DTA114TS	TRANSISTOR			
Q 271	2SC2001(L,K)	TRANSISTOR			
Q 331	2SC1740S(R,S)	TRANSISTOR			
Q 332	DTA144ES	TRANSISTOR			
Q 333	DTA114TS	TRANSISTOR			
Q 901	2SB772(Q,P)	TRANSISTOR	8V REG		
Q 902	2SC1740S(R,S)	TRANSISTOR			
Q 903	2SC1740S(R,S)	TRANSISTOR			
Q 911	2SB772(Q,P)	TRANSISTOR			
Q 912	2SC1740S(R,S)	TRANSISTOR			
Q 913	2SC1740S(R,S)	TRANSISTOR			
Q 995	2SA952(L,K)	TRANSISTOR			
R 1	QRD161J-470	C. RESISTOR	47 5% 1/6W		
R 2	QRD161J-220	C. RESISTOR	22 5% 1/6W		VX,U
R 3	QRD161J-104	C. RESISTOR	VX,U ONLY		
R 5	QRD161J-224	C. RESISTOR	220K 5% 1/6W		
R 6	QRD161J-471	C. RESISTOR	470 5% 1/6W		
R 7	QRD161J-331	C. RESISTOR	330 5% 1/6W		
R 11	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 12	QRD161J-104	C. RESISTOR	VX,U ONLY		VX,U
R 14	QRD161J-104	C. RESISTOR	J.C.U. ONLY		J,C,U
R 15	QRD161J-102	C. RESISTOR	1.0K 5% 1/6W		
R 16	QRD167J-682	C. RESISTOR	J.C.U. ONLY		J,C,U
R 17	QRD167J-682	C. RESISTOR	J.C.U. ONLY		J,C,U
R 18	QRD161J-102	C. RESISTOR	J.C. ONLY		J,C
R 22	QRD161J-470	C. RESISTOR	47 5% 1/6W		
R 24	QRD161J-103	C. RESISTOR	10K 5% 1/6W		
R 25	QRD161J-104	C. RESISTOR	J.C.U. ONLY		J,C,U
R 28	QRD161J-103	C. RESISTOR	10K 5% 1/6W		
R 101	QRD161J-183	C. RESISTOR	18K 5% 1/6W		
R 102	QRD161J-224	C. RESISTOR	220K 5% 1/6W		
R 103	QRD167J-682	C. RESISTOR	6.8K 5% 1/6W		
R 105	QRD167J-121	C. RESISTOR	120 5% 1/6W		
R 115	QRD161J-392	C. RESISTOR	J.C.U. ONLY		J,C,U
R 117	QRD161J-273	C. RESISTOR	27K 5% 1/6W		
R 127	QRD161J-392	C. RESISTOR	3.9K 5% 1/6W		
R 161	QRD161J-821	C. RESISTOR	820 5% 1/6W		
R 170	QRD161J-225	C. RESISTOR	2.2K 5% 1/6W		
R 171	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		
R 172	QRD161J-334	C. RESISTOR	330K 5% 1/6W		
R 173	QRD167J-562	C. RESISTOR	5.6K 5% 1/6W		

BLOCK NO. 04111111					BLOCK NO. 04111111		
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME
R 904	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		R 904	QRD167J-562	C.RESISTOR
R 905	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		R 905	QRD161J-472	C.RESISTOR
R 906	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		R 906	QRD161J-822	C.RESISTOR
R 911	QRD161J-681	C.RESISTOR	680 5% 1/6W		R 911	QRD161J-681	C.RESISTOR
R 912	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		R 912	QRD161J-222	C.RESISTOR
R 913	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W		R 913	QRD167J-682	C.RESISTOR
R 914	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		R 914	QRD161J-222	C.RESISTOR
R 915	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		R 915	QRD161J-472	C.RESISTOR
R 916	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		R 916	QRD161J-822	C.RESISTOR
R 925	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W		R 925	QRD161J-272	C.RESISTOR
R 996	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W		R 996	QRD161J-272	C.RESISTOR
R 997	QRD161J-184	C.RESISTOR	180K 5% 1/6W		R 997	QRD161J-184	C.RESISTOR
S 1	QSL6A23-V02	SLIDE SW	BAND FOR "J,C"	C,J	S 1	QSL6A23-V02	SLIDE SW
S 1	QSL6A84-V01	LEVER SWITCH		B,E,G,GI,VX,J	S 1	QSL6A84-V01	LEVER SWITCH
S 301	QSTK101-V05	PUSH SWITCH	R/P SW		S 301	QSTK101-V05	PUSH SWITCH
S 303	QSL6A43-V01	SLIDE SW	FUNCTION SW		S 303	QSL6A43-V01	SLIDE SW
S 331	QSS7A13-V05	SLIDE SW	BEAT CUT SW		S 331	QSS7A13-V05	SLIDE SW
T 1	VQT7F12-111	IFT	FM IF		T 1	VQT7F12-111	IFT
T 2	VGT7A21-106	IFT	AM IF		T 2	VGT7A21-106	IFT
TC 11	QAT3722-100M	T.CAPACITOR	ALL VERSION		TC 11	QAT3722-100M	T.CAPACITOR
TC 12	QAT3722-100M	T.CAPACITOR		U	TC 12	QAT3722-100M	T.CAPACITOR
TC 13	QAT3722-100M	T.CAPACITOR	J,C ONLY	U	TC 13	QAT3722-100M	T.CAPACITOR
VC1-1	GAP1224-226	V.CAPACITOR		J	VC1-1	GAP1224-226	V.CAPACITOR
VC1-2	GAP1224-226	V.CAPACITOR		J	VC1-2	GAP1224-226	V.CAPACITOR
VC1-3	GAP1224-226	V.CAPACITOR		J	VC1-3	GAP1224-226	V.CAPACITOR
VC1-4	GAP1224-226	V.CAPACITOR	J,C ONLY	J	VC1-4	GAP1224-226	V.CAPACITOR
VR361	QVDB12D-V01	V.RESISTOR	U ONLY		VR361	QVDB12D-V01	V.RESISTOR
VR362	QVDB17A-V02	V.RESISTOR (A)	U ONLY		VR362	QVDB17A-V02	V.RESISTOR (A)
VR362	QVDB17B-V02	V.RESISTOR	U ONLY		VR362	QVDB17B-V02	V.RESISTOR

BLOCK NO. 04111111					BLOCK NO. 04111111		
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME
R 174	QRD161J-122	C.RESISTOR	1.2K 5% 1/6W		R 174	QRD161J-122	C.RESISTOR
R 175	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W		R 175	QRD167J-332	C.RESISTOR
R 177	QRD161J-243	C.RESISTOR	24K 5% 1/6W		R 177	QRD161J-243	C.RESISTOR
R 179	QRD161J-224	C.RESISTOR	220K 5% 1/6W		R 179	QRD161J-224	C.RESISTOR
R 179	QRD161J-224	C.RESISTOR	2.2K 5% 1/6W		R 179	QRD161J-224	C.RESISTOR
R 180	QRD161J-223	C.RESISTOR	22K 5% 1/6W		R 180	QRD161J-223	C.RESISTOR
R 181	QRD167J-121	C.RESISTOR	120 5% 1/6W		R 181	QRD167J-121	C.RESISTOR
R 182	QRD161J-2R2	C.RESISTOR	2.2 5% 1/6W		R 182	QRD161J-2R2	C.RESISTOR
R 183	QRD161J-101	C.RESISTOR	100 5% 1/6W		R 183	QRD161J-101	C.RESISTOR
R 184	QRD161J-183	C.RESISTOR	18K 5% 1/6W		R 184	QRD161J-183	C.RESISTOR
R 201	QRD161J-183	C.RESISTOR	18K 5% 1/6W		R 201	QRD161J-183	C.RESISTOR
R 202	QRD161J-224	C.RESISTOR	220K 5% 1/6W		R 202	QRD161J-224	C.RESISTOR
R 203	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W		R 203	QRD167J-682	C.RESISTOR
R 205	QRD167J-121	C.RESISTOR	120 5% 1/6W		R 205	QRD167J-121	C.RESISTOR
R 215	QRD161J-392	C.RESISTOR	J,C,U ONLY	J,C,U	R 215	QRD161J-392	C.RESISTOR
R 217	QRD161J-273	C.RESISTOR	27K 5% 1/6W		R 217	QRD161J-273	C.RESISTOR
R 227	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		R 227	QRD161J-392	C.RESISTOR
R 261	QRD161J-821	C.RESISTOR	820 5% 1/6W		R 261	QRD161J-821	C.RESISTOR
R 270	QRD161J-225	C.RESISTOR	2.2M 5% 1/6W		R 270	QRD161J-225	C.RESISTOR
R 271	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		R 271	QRD161J-222	C.RESISTOR
R 272	QRD161J-334	C.RESISTOR	330K 5% 1/6W		R 272	QRD161J-334	C.RESISTOR
R 273	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		R 273	QRD167J-562	C.RESISTOR
R 274	QRD161J-122	C.RESISTOR	1.2K 5% 1/6W		R 274	QRD161J-122	C.RESISTOR
R 275	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W		R 275	QRD167J-332	C.RESISTOR
R 277	QRD161J-243	C.RESISTOR	24K 5% 1/6W		R 277	QRD161J-243	C.RESISTOR
R 278	QRD161J-224	C.RESISTOR	220K 5% 1/6W		R 278	QRD161J-224	C.RESISTOR
R 279	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		R 279	QRD161J-222	C.RESISTOR
R 280	QRD161J-223	C.RESISTOR	22K 5% 1/6W		R 280	QRD161J-223	C.RESISTOR
R 281	QRD167J-121	C.RESISTOR	120 5% 1/6W		R 281	QRD167J-121	C.RESISTOR
R 282	QRD161J-2R2	C.RESISTOR	2.2 5% 1/6W		R 282	QRD161J-2R2	C.RESISTOR
R 283	QRD161J-101	C.RESISTOR	100 5% 1/6W		R 283	QRD161J-101	C.RESISTOR
R 284	QRD161J-183	C.RESISTOR	18K 5% 1/6W		R 284	QRD161J-183	C.RESISTOR
R 304	QRD161J-101	C.RESISTOR	100 5% 1/6W		R 304	QRD161J-101	C.RESISTOR
R 305	QRD161J-225	C.RESISTOR	2.2M 5% 1/6W		R 305	QRD161J-225	C.RESISTOR
R 306	QRD161J-103	C.RESISTOR	10K 5% 1/6W		R 306	QRD161J-103	C.RESISTOR
R 307	QRD161J-561	C.RESISTOR	560 5% 1/6W		R 307	QRD161J-561	C.RESISTOR
R 310	QRD167J-121	C.RESISTOR	120 5% 1/6W		R 310	QRD167J-121	C.RESISTOR
R 330	QRD161J-223	C.RESISTOR	22K 5% 1/6W		R 330	QRD161J-223	C.RESISTOR
R 331	QRD161J-120	C.RESISTOR	12 5% 1/6W		R 331	QRD161J-120	C.RESISTOR
R 332	QRD161J-123	C.RESISTOR	12K 5% 1/6W		R 332	QRD161J-123	C.RESISTOR
R 333	QRD161J-101	C.RESISTOR	100 5% 1/6W		R 333	QRD161J-101	C.RESISTOR
R 334	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		R 334	QRD161J-222	C.RESISTOR
R 335	QRD161J-391	C.RESISTOR	390 5% 1/6W		R 335	QRD161J-391	C.RESISTOR
R 336	QRD161J-561	C.RESISTOR	560 5% 1/6W		R 336	QRD161J-561	C.RESISTOR
R 340	QRD167J-562	C.RESISTOR	U ONLY USE	U	R 340	QRD167J-562	C.RESISTOR
R 371	QRD161J-181	C.RESISTOR	180 5% 1/6W		R 371	QRD161J-181	C.RESISTOR
R 372	QRD161J-103	C.RESISTOR	10K 5% 1/6W		R 372	QRD161J-103	C.RESISTOR
R 373	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		R 373	QRD167J-562	C.RESISTOR
R 374	QRD161J-154	C.RESISTOR	150K 5% 1/6W		R 374	QRD161J-154	C.RESISTOR
R 375	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		R 375	QRD161J-392	C.RESISTOR
R 381	QRD161J-330	C.RESISTOR	33 5% 1/6W		R 381	QRD161J-330	C.RESISTOR
R 901	QRD161J-681	C.RESISTOR	680 5% 1/6W		R 901	QRD161J-681	C.RESISTOR
R 902	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		R 902	QRD161J-222	C.RESISTOR
R 903	QRD161J-221	C.RESISTOR	220 5% 1/6W		R 903	QRD161J-221	C.RESISTOR

● LCD & Microcomputer
/ Power Supply P.C. Board

BLOCK NO. 02					SUFFIX
A	REF.	PARTS NO.	PARTS NAME	REMARKS	
	C 325	GETC1CM-106Z	E. CAPACITOR	10MF 20X 16V	
	C 374	GETC1HM-105Z	E. CAPACITOR	1.0MF 20X 50V	
	C 701	GER41AM-107	E. CAPACITOR	100MF 20X 10V	
	C 702	QCC11EM-103V	C. CAPACITOR	.010MF 20X 25V	
	C 704	QCVB1CM-103V	C. CAPACITOR	.010MF 20X 16V	
	C 705	QER61HM-474Z	E. CAPACITOR	.47MF 20X 50V	
	C 991	QCF31HP-103Z	C. CAPACITOR	J.C.A.U ONLY	J.C.U
	C 992	QCF31HP-103Z	C. CAPACITOR	J.C.A.U ONLY	J.C.U
	C 993	QCF31HP-103Z	C. CAPACITOR	J.C.A.U ONLY	J.C.U
	C 994	QCF31HP-103Z	C. CAPACITOR	J.C.A.U ONLY	J.C.U
	CNTP1	VMC0041-003	CONNECTOR	TEST POINT	
	CN306	VMC0289-P08	CONNECTOR	CONN. BOARD	
	CN351	VMC0107-R05	SOCKET	CD	
	CN352	VMC0107-002	SOCKET	CD SYNCHRO	
	CN701	VMC0163-R13	CONNECTOR	FROM CD	
	CN997	VMC0041-003	CONNECTOR	CONN TO MAIN PW	
	D 372	1SS133	DIODE		
	D 377	1SS133	DIODE		
	D 991	1N5401TM	SI DIODE		
	D 992	1N5401TM	SI DIODE		
	D 993	1N5401TM	SI DIODE		
	D 994	1N5401TM	SI DIODE		
	IC701	MN150804JJA-1	IC		
	J 995	QMA431B-V01	DC JACK	DC IN	E.U
	J 999	QMC0263-004BS	AC SOCKET		B
	J 999	QMC0263-004BS	AC SOCKET		E.G. GI. VX. J
	J 999	QMCB251-V01	AC SOCKET	FOR C/U ONLY	J/C
	LCD01	VGL1145-001	LCD		
	Q 125	DTC114TS	TRANSISTOR		
	Q 225	DTC114TS	TRANSISTOR		
	Q 701	DTC114ES	DEGI TR		
	R 112	QRD167J-682	C. RESISTOR	6.8K 5X 1/6W	
	R 113	QRD161J-123	C. RESISTOR	12K 5X 1/6W	
	R 114	QRD167J-682	C. RESISTOR	6.8K 5X 1/6W	
	R 212	QRD167J-682	C. RESISTOR	6.8K 5X 1/6W	
	R 213	QRD161J-123	C. RESISTOR	12K 5X 1/6W	
	R 214	QRD167J-682	C. RESISTOR	6.8K 5X 1/6W	
	R 325	QRD161J-471	C. RESISTOR	470 5X 1/6W	
	R 326	QRD161J-681	C. RESISTOR	680 5X 1/6W	
	R 328	QRD161J-472	C. RESISTOR	4.7K 5X 1/6W	
	R 376	QRD161J-224	C. RESISTOR	220K 5X 1/6W	
	R 377	QRD161J-104	C. RESISTOR	100K 5X 1/6W	
	R 378	QRD161J-103	C. RESISTOR	10K 5X 1/6W	
	R 701	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 702	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 703	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 704	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 705	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 706	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 707	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 708	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 709	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 710	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	

BLOCK NO. 02					SUFFIX
A	REF.	PARTS NO.	PARTS NAME	REMARKS	
	R 711	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 712	QRD161J-222	C. RESISTOR	2.2K 5X 1/6W	
	R 714	QRD161J-103	C. RESISTOR	10K 5X 1/6W	
	R 715	QRD161J-103	C. RESISTOR	10K 5X 1/6W	
	R 716	QRD161J-103	C. RESISTOR	10K 5X 1/6W	
	R 717	QRD161J-152	C. RESISTOR	1.5K 5X 1/6W	
	R 718	QRD161J-472	C. RESISTOR	4.7K 5X 1/6W	
	R 719	QRD161J-103	C. RESISTOR	10K 5X 1/6W	
	R 720	QRD161J-472	C. RESISTOR	4.7K 5X 1/6W	
	S 371	QSP2E12-V01	BASS SW	MULTI BASS SW	
	S 701	QSQ1A11-V04Z	TACT SW	REWIND	
	S 702	QSQ1A11-V04Z	TACT SW	FORWARD	
	S 703	QSQ1A11-V04Z	TACT SW	MEMORY	
	S 704	QSQ1A11-V04Z	TACT SW	PLAY/PAUSE	
	S 705	QSQ1A11-V04Z	TACT SW	STOP	
	S 706	QSQ1A11-V04Z	TACT SW	REPEAT	
	S 710	VSH1153-001	SWITCH	OPEN/CLOSE SW	
	S 995	VMZ0068-001	SELECT SWITCH	VOLTAGE SELECT	U
	X 701	EFO-EC4194A4	CERAMIC RESONAT		

● CD Amplifier P.C. Board

BLOCK NO. 03					BLOCK NO. 03				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
C 501	QCB81HK-821Y	C-CAPACITOR	820PF 10% 50V		CN502	FMD7003-001F	CD MECHA WIRE		
C 503	QCVB1CM-103Y	C-CAPACITOR	.010MF 20% 16V		CN601	VMC0163-013	CONNECTOR	TO CPU	
C 504	QETC1CM-106Z	E-CAPACITOR	10MF 20% 16V		IC501	TAB191F	IC	SERVO LSI	
C 511	QCSB1HJ-389	C-CAPACITOR	3.9PF 10% 50V		IC502	BA6298FP	IC	POWER DRIVER	
C 512	QCSB1HJ-270V	C-CAPACITOR	27PF 5% 50V		IC601	TC9236AF	IC	1 CHIP PROCESSE	
C 513	QFLC1HJ-104ZM	M-CAPACITOR	.10MF 5% 50V		IC603	TDA1311A	IC	D/A CONVERTER	
C 514	QFLC1HJ-472ZM	M-CAPACITOR	4700PF 5% 50V		IC604	BA15218N	I.C	L.P.F	
C 521	QCB81HK-331Y	C-CAPACITOR	330PF 10% 50V		Q 581	2SA952(L,K)	TRANSISTOR	5V REGULATOR	
C 522	QFLC1HJ-473ZM	M-CAPACITOR	.047MF 5% 50V		Q 591	2SA933S(RS)	TRANSISTOR		
C 523	QF81HJ-154	M-M-CAPACITOR	.15MF 5% 50V		Q 651	DTA114TS	TRANSISTOR	EMPHASIS SW	
C 524	QF81HJ-475ZM	E-CAPACITOR	4.7MF +30%-10%		Q 661	DTA114TS	TRANSISTOR		
C 529	QETC1AM-336ZM	E-CAPACITOR	33MF 20% 10V		Q 671	DTA114TS	TRANSISTOR		
C 531	QCVB1CM-822Y	C-CAPACITOR	8200PF 20% 16V		R 501	QRD161J-124	C-RESISTOR	120K 5% 1/6W	
C 541	QCB81HK-101Y	C-CAPACITOR	100PF 10% 50V		R 502	QRD161J-103	C-RESISTOR	10K 5% 1/6W	
C 542	QFLC1HJ-103ZM	M-CAPACITOR	.010MF 5% 50V		R 504	QRD161J-202	C-RESISTOR	2.0K 5% 1/6W	
C 543	QFLC1HJ-393ZM	M-CAPACITOR	.039MF 5% 50V		R 505	QRD161J-220	C-RESISTOR	22 5% 1/6W	
C 545	QF81HJ-105Z	NP E-CAPACITOR	1.0MF 20% 50V		R 506	QRD161J-101	C-RESISTOR	100 5% 1/6W	
C 546	QFLC1HJ-223ZM	M-CAPACITOR	.022MF 5% 50V		R 511	QRD161J-183	C-RESISTOR	18K 5% 1/6W	
C 561	QETC1AM-476Z	E-CAPACITOR	47MF 20% 10V		R 512	QRD161J-392	C-RESISTOR	3.9K 5% 1/6W	
C 562	QETC1HM-475Z	E-CAPACITOR	4.7MF 20% 50V		R 513	QRD161J-332	C-RESISTOR	3.3K 5% 1/6W	
C 581	QETC1AM-477ZM	E-CAPACITOR	470MF 20% 10V		R 514	QRD161J-472	C-RESISTOR	4.7K 5% 1/6W	
C 582	QER41AM-107	E-CAPACITOR	100MF 20% 10V		R 515	QRD161J-103	C-RESISTOR	10K 5% 1/6W	
C 583	QETC1AM-227Z	E-CAPACITOR	220MF 20% 10V		R 516	QRD161J-103	C-RESISTOR	10K 5% 1/6W	
C 591	VCP0012-105Z	C-CAPACITOR			R 517	QRD161J-202	C-RESISTOR	2.0K 5% 1/6W	
C 592	VCP0012-105Z	C-CAPACITOR			R 521	QRD161J-154	C-RESISTOR	150K 5% 1/6W	
C 593	QCC11EM-104V	C-CAPACITOR	.10MF 20% 25V		R 522	QRD161J-392	C-RESISTOR	3.9K 5% 1/6W	
C 599	QETC1AM-107ZM	E-CAPACITOR	100MF 20% 10V		R 523	QRD161J-472	C-RESISTOR	4.7K 5% 1/6W	
C 601	QCS1HJ-330	C-CAPACITOR	FOR CRYSTAL		R 524	QRD161J-331	C-RESISTOR	330 5% 1/6W	
C 602	QCC11HJ-330	C-CAPACITOR	FOR CRYSTAL		R 525	QRD161J-472	C-RESISTOR	4.7K 5% 1/6W	
C 603	QCC11EM-473V	C-CAPACITOR	.047MF 20% 25V		R 529	QRD161J-562	C-RESISTOR	5.6K 5% 1/6W	
C 604	QCC11EM-104V	C-CAPACITOR	.10MF 20% 25V		R 531	QRD161J-473	C-RESISTOR	47K 5% 1/6W	
C 605	QCVB1CM-103Y	C-CAPACITOR	.010MF 20% 16V		R 532	QRD161J-104	C-RESISTOR	100K 5% 1/6W	
C 606	QCC11EM-473V	C-CAPACITOR	.047MF 20% 25V		R 533	QRD161J-153	C-RESISTOR	15K 5% 1/6W	
C 611	QCS1HJ-101Z	C-CAPACITOR	100PF 5% 50V		R 541	QRD161J-123	C-RESISTOR	12K 5% 1/6W	
C 612	QFLC1HJ-103ZM	M-CAPACITOR	.010MF 5% 50V		R 542	QRD161J-332	C-RESISTOR	3.3K 5% 1/6W	
C 613	QFLC1HJ-103ZM	M-CAPACITOR	.010MF 5% 50V		R 543	QRD161J-473	C-RESISTOR	47K 5% 1/6W	
C 614	QFN31HJ-332Z	M-CAPACITOR	3300PF 5% 50V		R 544	QRD161J-223	C-RESISTOR	22K 5% 1/6W	
C 615	QFN31HJ-332Z	M-CAPACITOR	3300PF 5% 50V		R 545	QRD161J-103	C-RESISTOR	10K 5% 1/6W	
C 631	QCC11EM-473V	C-CAPACITOR	.047MF 20% 25V		R 548	QRD161J-153	C-RESISTOR	15K 5% 1/6W	
C 632	QETC1AM-477ZM	E-CAPACITOR	470MF 20% 10V		R 549	QRD161J-321	C-RESISTOR	820 5% 1/6W	
C 651	QETC1AM-107ZM	E-CAPACITOR	100MF 20% 10V		R 550	QRD161J-104	C-RESISTOR	100K 5% 1/6W	
C 652	QETC1AM-226ZM	E-CAPACITOR	22MF 20% 10V		R 551	QRD161J-223	C-RESISTOR	22K 5% 1/6W	
C 661	QETC1HM-475Z	E-CAPACITOR	4.7MF 20% 50V		R 552	QRD161J-562	C-RESISTOR	5.6K 5% 1/6W	
C 662	QCVB1CM-472Y	C-CAPACITOR	4700PF 20% 16V		R 553	QRD161J-321	C-RESISTOR	820 5% 1/6W	
C 663	QCVB1CM-822Y	C-CAPACITOR	8200PF 20% 16V		R 555	QRD161J-332	C-RESISTOR	3.3K 5% 1/6W	
C 664	QCB81HK-820Y	C-CAPACITOR	82PF 10% 50V		R 559	QRD161J-125	C-RESISTOR	1.2K 5% 1/6W	
C 665	QETC1HM-335Z	E-CAPACITOR	3.3MF 20% 50V		R 561	QRD161J-562	C-RESISTOR	5.6K 5% 1/6W	
C 666	QCC11EM-123V	C-CAPACITOR	.012MF 20% 25V		R 562	QRD161J-102	C-RESISTOR	1.0K 5% 1/6W	
C 671	QETC1HM-475Z	E-CAPACITOR	4.7MF 20% 50V		R 563	QRD161J-332	C-RESISTOR	1.5K 5% 1/6W	
C 672	QCVB1CM-472Y	C-CAPACITOR	4700PF 20% 16V		R 564	QRD161J-152	C-RESISTOR	3.3K 5% 1/6W	
C 673	QCVB1CM-822Y	C-CAPACITOR	8200PF 20% 16V		R 565	QRD161J-583	C-RESISTOR	68K 5% 1/6W	
C 674	QCB81HK-820Y	C-CAPACITOR	82PF 10% 50V		R 566	QRD161J-273	C-RESISTOR	27K 5% 1/6W	
C 675	QETC1HM-335Z	E-CAPACITOR	3.3MF 20% 50V		R 591	QRD161J-473	C-RESISTOR	47K 5% 1/6W	
C 676	QCC11EM-123V	C-CAPACITOR	.012MF 20% 25V		R 611	QRD161J-102	C-RESISTOR	1.0K 5% 1/6W	
CN501	VMC0272-015	CONNECTOR	TO PICK UP						

● Mixing mic P.C. Board
(U Version only)

BLOCK NO. 03					BLOCK NO. 04				
REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 632	QRD161J-103	C.RESISTOR	10K 5% 1/6W		C 850	QETC1HM-224Z	E.CAPACITOR	.22MF 20% 50V	U
R 633	QRD161J-224	C.RESISTOR	220K 5% 1/6W		C 854	QETC1AM-107Z	E.CAPACITOR	100MF 20% 10V	U
R 614	QRD161J-473	C.RESISTOR	47K 5% 1/6W		C 855	QETC1AM-477Z	E.CAPACITOR	470MF 20% 10V	U
R 615	QRD161J-225	C.RESISTOR	2.2M 5% 1/6W		C 857	QETC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	U
R 616	QRD161J-333	C.RESISTOR	33K 5% 1/6W		C 859	QFLB1HK-104	M.CAPA 1.0M	.10MF 10% 50V	U
R 631	QRD161J-820	C.RESISTOR	82 5% 1/6W		C 860	QCY31HK-332Z	C.CAPACITOR	3300PF 10% 50V	U
R 638	QRD161J-331	C.RESISTOR	330 5% 1/6W		C 861	QETC1CM-476Z	E.CAPACITOR	47MF 20% 16V	U
R 639	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		C 865	QETC1HM-105Z	E.CAPACITOR	1.0MF 20% 50V	U
R 651	QRD161J-820	C.RESISTOR	82 5% 1/6W		CN850	VMC0041-003	CONNECTOR		U
R 652	QRD161J-473	C.RESISTOR	47K 5% 1/6W		D 850	1SS133	DIODE		U
R 653	QRD161J-473	C.RESISTOR	47K 5% 1/6W		D 851	1SS133	DIODE		U
R 661	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		J 850	QMS6022-V02	JACK	MIC JACK	U
R 662	QRD161J-562	C.RESISTOR	5.6K 5% 1/6W		Q 850	2SC945A	TRANSISTOR		U
R 663	QRD161J-103	C.RESISTOR	10K 5% 1/6W		Q 851	2SC945A	TRANSISTOR		U
R 664	QRD161J-103	C.RESISTOR	10K 5% 1/6W		Q 852	2SC945L(P-Q)	TRANSISTOR		U
R 665	QRD161J-332	C.RESISTOR	3.3K 5% 1/6W		Q 853	2SC945L(P-Q)	TRANSISTOR		U
R 667	QRD161J-122	C.RESISTOR	1.2K 5% 1/6W		R 850	QRD161J-152	C.RESISTOR	1.5K 5% 1/6W	U
R 671	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		R 852	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	U
R 672	QRD161J-562	C.RESISTOR	5.6K 5% 1/6W		R 854	QRD161J-560	C.RESISTOR	56 5% 1/6W	U
R 673	QRD161J-103	C.RESISTOR	10K 5% 1/6W		R 857	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W	U
R 674	QRD161J-103	C.RESISTOR	10K 5% 1/6W		R 859	QRD161J-680	C.RESISTOR	68 5% 1/6W	U
R 675	QRD161J-332	C.RESISTOR	3.3K 5% 1/6W		R 861	QRD161J-101	C.RESISTOR	100 5% 1/6W	U
R 677	QRD161J-122	C.RESISTOR	1.2K 5% 1/6W		R 862	QRD161J-101	C.RESISTOR	100 5% 1/6W	U
VR501	QVPA601-154A	V.RESISTOR	TR OFFSET ADJ.		R 863	QRD161J-103	C.RESISTOR	10K 5% 1/6W	U
W 301	FMDM7003-001G	HEAD WIRE			R 865	QRD161J-475	C.RESISTOR	4.7M 5% 1/6W	U
W 302	FMDM7003-001E	MOTOR WIRE			R 866	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W	U
W 303	FMDM7003-001B	R.P SW WIRE			R 867	QRD161J-103	C.RESISTOR	10K 5% 1/6W	U
W 305	FMWZ220-19RR	BATT.WIRE			R 868	QRD161J-471	C.RESISTOR	470 5% 1/6W	U
W 306	FMWZ222-18RR	BATT.WIRE			R 870	QRD161J-682	C.RESISTOR	6.8K 5% 1/6W	U
W 997	FMDM7003-001D	AC WIRE			R 871	QRD161J-332	C.RESISTOR	3.3K 5% 1/6W	U
X 601	CSAB-46MT	CERAMIC RESONAT	8.46MHZ		VR851	QVAA26B-V01	V.RESISTOR	MIC VOLUME	U

16. Illustration of Packing and Parts List

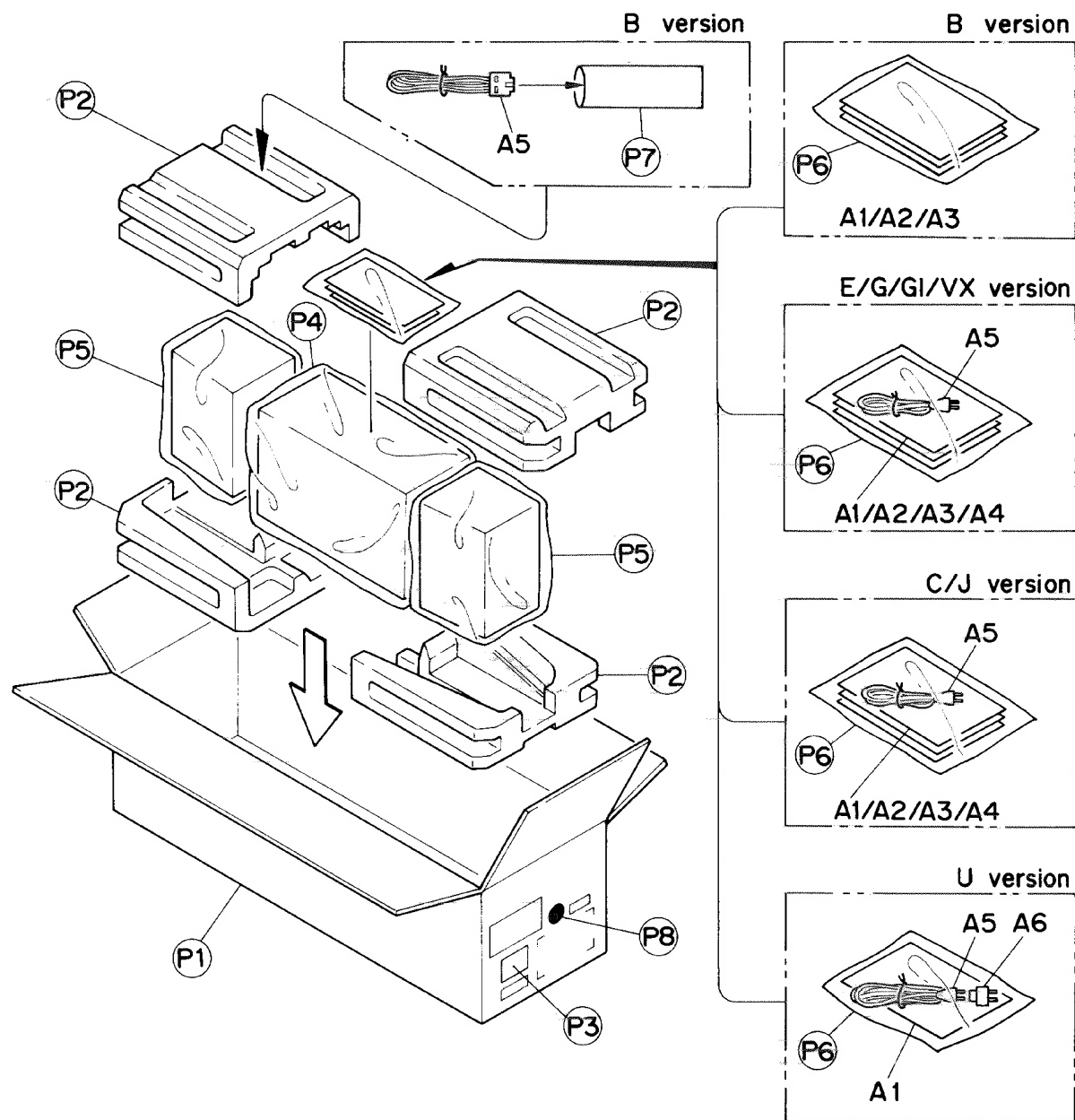


Fig. 16-1

● Packing parts list

BLOCK NO. M5MM

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
P	1	FMPC7003-001	CARTON		1		
P	2	FMPH1006-001	CUSHION UPP L/R		1		
P	3	*****	COMPUTER LABEL		2		
P	4	VPE3020-021	POLY BAG	RECEIVER	1		
P	5	VPE3020-018	POLY BAG	SPEAKER BOX	2		
P	6	E300196-033B	ENVELOPE	INSTRUCTIONS	1		
P	7	E300196-033B	POLY BAG	POWER CORD	1	B	
P	8	QZLA001-011	APPROVAL MARK		1	E/G	

17. Accessories

BLOCK NO. M6MM

△	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	FMUN7003-611M	INSTRUCTIONS		1	J,C	
		FMUN7003-111M	INSTRUCTIONS		1	U	
		FMUN7003-261M	INSTRUCTIONS		1	E,G	
		FMUN7003-251M	INSTRUCTIONS		1	B,E,GI	
		FMUN7003-911M	INSTRUCTIONS		1	VX	
	A 2	FMUN7003-921M	INSTRUCTIONS		1	VX	
		BT-20047F	WARRANTY CARD		1	J	
		BT-20071B	SERVICE NETWORK		1	C	
		BT20060	WARRANTY CARD		1	B	
	A 3	BT-20137	SERVICE NETWORK		1	J	
		BT-20025L	WARRANTY CARD		1	C	
		BT-20066A	WARRANTY CARD		1	B,G	
	A 4	BT-20135	WARRANTY CARD		1	G	
		BT-20044G	SAFTY SHEET		1	J	
	A 5	QMP7350-150	POWER CORD		1	U	
△		QMP1350-183	POWER CORD		1	J,C	
△		QMP5520-183	POWER CORD		1	B	
△		QMP39F0-183	POWER CORD		1	E,G,GI,VX	
	A 6	V04062-001	CONTHI PLUG		1	U	



VICTOR COMPANY OF JAPAN, LIMITED

AUDIO PRODUCTS DIVISION, MAEBASHI PLANT

10-1, 1-chome, Ohwatari-machi, Maebashi-city, 371, Japan



Printed in Japan
-H0611-S-